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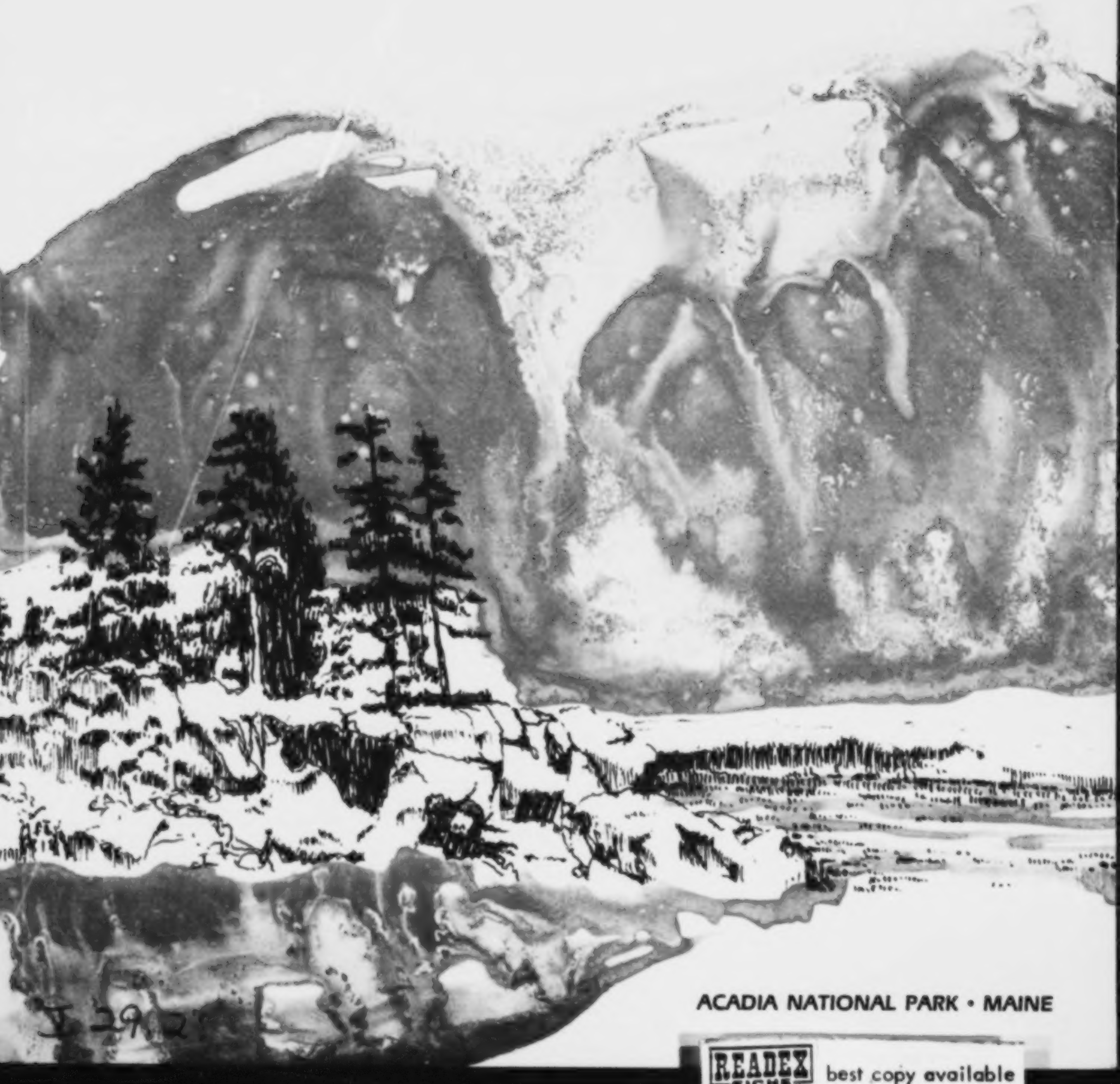
GENERAL MANAGEMENT PLAN
ENVIRONMENTAL ASSESSMENT



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general management plan
environmental assessment

public review draft
august 1991

ACADIA NATIONAL PARK • MAINE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE
DENVER SERVICE CENTER

SUMMARY

The purpose of the Acadia National Park general management plan is to define the basic management philosophy that will guide park management decisions over the next 10 to 15 years and to provide strategies for resolving issues and achieving the identified management objectives. This *Draft General Management Plan/Environmental Assessment* analyzes the effects of the feasible range of alternative strategies, as required by federal regulations. Briefly, the alternatives are as follows:

THE DISPERSED USE ALTERNATIVE

The dispersed use alternative would accommodate modest increases in visitation by dispersing visitors throughout more of the park and throughout the year. Visitor services, support facilities, and concessions would be developed and expanded. Proposals include a new visitor center, expanded horse and carriage concessions, enhanced visiting equestrian facilities, restoration of the carriage road and hiking trail systems, reestablishment of abandoned picnic areas, establishment of a town-park shuttle bus system, and development of new bikeways and walking trails connecting the park with surrounding communities. Effective implementation of this alternative would depend upon collaboration between the National Park Service, surrounding communities, schools, state and federal agencies, and special interest groups. Estimated development costs would be $30 million. Impacts would include expanded recreational options, improved protection of cultural resources, loss of opportunities for solitude, and additional fragmentation of habitat.

THE MANAGED USE ALTERNATIVE

The managed use alternative would retain and enhance the range of high-density- to low-density recreational opportunities but would not accommodate any increase in use during the peak season. Resources would be monitored and visitor use managed to avoid unacceptable levels of impact. The carriage road and hiking trail systems would be restored. With the exception of a new visitor center and support facilities, new development in the park would be kept to a minimum. Implementation of this alternative would entail collaboration between the National Park Service, surrounding communities, schools, state and federal agencies, and special interest groups. Estimated development costs would be $22 million. Impacts would include some restriction of visitor access and enhanced protection of park resources.

THE MINIMUM ACTION ALTERNATIVE

The minimum action alternative would involve the systematic improvement of park facilities to meet resource management and visitor use needs at minimal levels. Proposals include a major expansion of the existing visitor center and extension of one-way traffic with right-hand parking along the loop road. Estimated development costs would be $15 million. Impacts would include improved orientation, but a further decline in aesthetics and safety along the loop road.

THE STATUS QUO ALTERNATIVE

Under this alternative, park operations would continue to be primarily reactive; only the most critical problems would be dealt with as the park had resources available.

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PURPOSE AND SCOPE OF THIS DOCUMENT

The purpose of the Acadia National Park general management plan is to define the basic management philosophy that will guide park management decisions over the next 10 to 15 years and to direct the development that will be required to support that philosophy. Planning for the Isle Au Haut portion of the park has been undertaken separately and is not included in the scope of this plan.

This *Draft General Management Plan / Environmental Assessment* describes a feasible range of alternatives for the general management plan and analyzes and compares the potential impacts of those alternatives. The document is divided into three parts: part one provides background information about the park and the planning process, part two describes the alternatives, and part three contains the environmental descriptions and analyses.

PART ONE: BACKGROUND

LEGISLATIVE HISTORY AND PURPOSE OF THE PARK

The legislative history of Acadia National Park officially began with the establishment of Sieur de Monts National Monument in 1916. The name was changed in 1919 to Lafayette National Park and in 1929 to Acadia National Park. The 1929 legislation (45 Stat. 1083) established the authority to expand the park by accepting donations of property within Hancock County and certain islands in Knox County. However, the legislation created a park with no permanent boundary and no authority to purchase land.

As property was donated, a fragmented patchwork of park lands developed. Lands were scattered, making management, protection, and visitor orientation difficult. Local towns were frustrated by the constant threat of unexpected donations eroding their tax bases. For 20 years, in an attempt to resolve these issues, the National Park Service, the towns, the Hancock County Planning Commission, and numerous conservation groups conducted arduous negotiations.

In 1982 separate boundary legislation (PL 97-335) was approved for park land in the town of Isle au Haut, and subsequently a development concept plan was approved. On September 25, 1986, boundary legislation (PL 99-420) was finally enacted for the rest of Acadia National Park. The law defined a permanent boundary and gave the National Park Service authority to acquire lands, but only within the designated boundary of Acadia National Park. Conservation easements may be acquired outside the boundary. (This authority does not apply to the town of Isle au Haut; acquisition of land within the boundaries of Isle au Haut continues to be covered by the authority outlined in Public Law 97-335.) The legislation identified approximately 175 tracts for acquisition and 24 for deletion; called for the establishment of an advisory commission, and outlined conditions for acquiring conservation easements outside the boundary (see appendix A).

Preservation of outstanding scenic, natural, scientific, and historic values has been the stated intent of people who have donated tens of thousands of acres for the creation of the park over the past seven decades and the intent of the secretary of the interior and the Congress in accepting them. In a letter he wrote to the secretary of the interior in 1916 offering lands on Mount Desert Island as a gift to the United States, George Dorr described the area as being

> rich in historic association, in scientific interest, and in landscape beauty.... It contains within itself the only heights that immediately front the open sea with mountainous character upon our eastern shore. It contains also, owing to past glacial action and its own variously resistant rocky structure, an extraordinary variety of topographic features which unite with the climate caused by the surrounding sea to fit it beyond any other single locality in the east for the shelter, growth, and permanent preservation of a wide range of life, both plant and animal. It forms a striking and instructive geologic record. And it constitutes the dominant and characteristic portion of the first land, Mount Desert Island, to be visited, described, and named by Champlain... in exploration of the New England coast. (Dorr 1942)

Congress cited the island's distinction as Champlain's landing place and the great scientific interest of its topography, geology, and fauna and flora in the original enabling legislation and indicated that the purpose of the monument was to protect these significant resource values, warning all unauthorized persons "not to appropriate, injure, destroy or remove any of the features or objects included within the boundaries." The day Sieur de Monts National Monument was dedicated, a Bishop Lawrence, one of the honored speakers, noted the intent of both preserving the area's resource values and of providing resource-based outdoor recreation for an urban population. He congratulated those gathered that the area would remain forever beautiful, and ended by saying that "here we have hills which those accustomed to city life may mount, and walks they may use to gain strength. Here we have a park naturally formed . . . to help city-dwelling men to gain new energy for heavy work in winter."

MAPS

TRANSPOSED TO

END OF VOLUME

OVERVIEW OF THE PARK

Acadia National Park protects a 35,000-acre landscape of rare scenic beauty on Mount Desert Island and on several offshore islands and the southern portion of Schoodic Peninsula. Acadia's mountains are the highest rocky headlands on the Atlantic shore of the United States. The vistas from these mountaintops encompass forested woodlands, shimmering lakes, quiet marshes, bold rocky shores, and on all sides, the ocean, which surrounds the park, bisects it, and strongly influences its character.

Acadia's weather is moderate compared to the rest of northern New England. An average annual precipitation of 47 inches is evenly distributed throughout the year. Frequent thawing periods prevent large, long-term snow accumulations. Ice storms are common in winter and early spring, and rain occurs in every month. Fog is also a frequent phenomenon at the park and tends to peak in June, tapering off in winter. Northeastern storms, occurring mainly in late fall and winter, are generally the most severe windstorms, though hurricanes occasionally pass through.

Besides being one of the most scenic places on the Atlantic coast, Mount Desert Island is also one of the most geologically interesting. Acadia's geologic history spans 500 million years during which mountain ranges have come and gone, seashores have risen and fallen, and glaciers have carved the landscape 20 to 30 times. Evidence of continental glacial action, including glacial lakes and U-shaped valleys, abounds; Somes Sound, the inlet bisecting the island, is the only fjord on the eastern seaboard of the United States.

A great variety of plants overlie the geologic record. Located in the midst of a broad transition zone from southern deciduous to northern coniferous forests, Acadia's habitats also range from seashore to mountaintop. Acadia offers habitat for many plant communities, including old growth spruce forests, bogs, fresh- and saltwater marshes, and jack pine stands growing at the southern limit of their range. More than 150 plant species are locally rare and of potential importance as indicators of rare habitats worthy of protection within the park (Greene 1990).

Paralleling the plant diversity is a diversity of animals. A variety of freshwater fishes, hundreds of invertebrates, 45 terrestrial mammals, 12 marine mammals, 17 amphibians, 5 reptiles, and 338 species of birds have been recorded in Acadia. With 21 species of breeding warblers, with northern and southern birds intermingled, and with seabirds alongside land birds, Acadia is considered one of the premier bird watching areas in the country. Two endangered animal species, the peregrine falcon (*Falco peregrinus*) and the bald eagle (*Haliaeetus leucocephalus*) live in the park.

The 40 miles of rocky shoreline and the nutrients of the sea are responsible for a tremendously rich intertidal flora and fauna, well exposed by the 10- to 12-foot tidal range. This, coupled with a rich terrestrial environment, results in an extremely varied assemblage of plant and animal life within the park.

The cultural history of Acadia is equally significant. Although much of the story has been lost to time, deep shell heaps testify to the presence of native American encampments dating back 6,000 years. Many of these archeological sites are within the park. When European exploration began, diseases of European origin swept through many native American communities. With mortality rates reaching 50–100%, the social fabric of Indian society was devastated. Artifacts of Maine's native American culture are exhibited at the Abbe Museum of Stone Age Antiquities, a private museum operated on park land.

Samuel de Champlain made the first contribution to the area's recorded history when he landed on Mount Desert Island in 1604. His explorations destined this land to be known as New France before it became New England. An early battle in the Anglo-French colonial rivalry occurred in what is now the park, near the entrance to Somes Sound. After 150 years of conflict, British troops triumphed, and British settlers began to arrive in the region. These early settlers, and others who joined them throughout the following century, forged a lifestyle that changed little for several generations. Dependent on both the land and sea, they harvested the forests; built schooners and brigs in nearly every local cove; shipped cargoes of cobblestones, dried and salted fish, ice, granite and lumber on coastal schooners; and pastured or tilled the more fertile soils. Their story is highlighted in the park's Islesford Historical Museum collections.

In the mid 1800s artists of the Hudson River School came to paint the dramatic scenery. Their canvasses advertised the beauties of Mount Desert Island to the outside world, inspiring "rusticators" who came to savor the scenery, hike the mountains, and study nature in a relaxed and peaceful atmosphere. The park hiking trails used today were started by the rusticators and village improvement societies and therefore represent one of the earliest recreational trail systems developed in the United States. Acadia's trail system is not only one of the oldest, but also one of the most diverse in the United States, offering people the opportunity to walk and hike in seashore, interior forest, and mountaintop settings.

As word of the island's appeal spread, Mount Desert evolved into a favorite summer retreat for socially and politically prominent people. Wealthy Americans transformed the landscape with elegant estates and extravagant lifestyles. Yet from the ranks of those wealthy summer residents, a strong commitment to conservation surfaced. Disturbed by the development pressures on the island, George Dorr, Charles Eliot, and ten other concerned residents began work to protect the land and ensure public access. They sought donations of private land, and their efforts culminated in the establishment of the first national park east of the Mississippi River.

Once the park was established, support was enlisted from John D. Rockefeller, Jr. Through his fortune and talents, the park grew in size and was made accessible by a 50-mile network of carriage roads and the scenic Park Loop Road, both of which are unique cultural resources unmatched in scope and scale anywhere in the United States. The carriage roads, designed to make the park accessible for nonmotorized recreation, represent "the finest example of broken stone roads designed for horse-drawn vehicles still extant in America" (Rieley 1989a). Beatrix Farrand, a prominent landscape architect, designed much of the landscape along the carriage road system. The Park Loop Road, much of which was designed by Frederick Law Olmsted, Jr., for scenic viewing by automobile, was carefully laid out to take advantage of some of the most spectacular vistas of mountains and shoreline in the eastern United States and to also afford intimate views of woodlands, lakes, meadows, and streams. These cultural resources have themselves become significant owing to their history, quality, uniqueness, and the sensitivity with which they were designed and built.

The surviving vernacular structures and their environs and the early works of the rusticators, wealthy summer residents, and village improvement societies, followed by the first park structures, the carriage road system, and the Park Loop Road, have combined to create a distinctive cultural polish on the Mount Desert Island landscape.

For more information on the natural and cultural resources of the park, see the "Description of the Environment" in part three of this document or consult the general references cited at the end of this document.

Summary of Significant Resource Values

- Scientific and scenic values of a 500-million-year-old glaciated landscape including the only fjord on the eastern seaboard of the United States
- Ecological value of a highly diverse transition zone providing habitat for a number of species of special concern
- Cultural value of archeological sites and historic structures associated with early American settlement, the development of summer colonies, the beginning of the conservation movement, and early recreational development, including the finest example of broken stone roads designed for horse-drawn vehicles still extant in America and the equally impressive loop road designed for scenic viewing by automobile
- Educational value of a tremendous diversity of natural, cultural, and scenic resources in a single area, providing an exceptional forum for environmental education
- Recreational values of a sanctuary where millions of visitors can enjoy high quality educational and recreational pursuits linking them with the parks' resources

MANAGEMENT ZONING CONCEPT

Use and management of lands and waters in Acadia National Park will be guided by management zoning based on resource values. The park has been divided into four zones with a number of subzones. The management emphasis for each of these zones and subzones is summarized in table 1 and described in greater detail in appendix B. The lands and waters included in each zone are shown on the Management Zoning map and listed in table 1. These areas are described in greater detail in the "Description of the Environment" in part three of this report.

Table 1: Management Zoning Summary

Zone/Subzone Management Emphasis	Park Areas (for a more detailed discussion see the "Description of the Environment")
Natural Zone: Land and waters managed to conserve natural resources and ecological processes and to provide for their use and enjoyment by the public in ways that do not adversely affect those resources and processes.	
Natural Environment Subzone: Natural resource conservation and provision of environmentally compatible interpretive and recreational activities.	• All zones of the park not classified in other zones or subzones
Protected Natural Area Subzone: Perpetuation of geological or ecological values without any or with minimal human intrusion. These lands and waters are set aside for strict protection because of unusual fragility or ecological significance.	• Wetlands: black spruce/tamarack swamp, salt marsh, fresh marsh, shrub bog, sphagnum/sedge bog, floating vegetation, alder, red maple, cedar, and other wetlands • Offshore islands wholly owned by the National Park Service: The Hop, Sheep Porcupine, Bald Porcupine (registered research natural area), Bar/Frenchman Bay, Schoodic, Little Moose (Big Moose is also shown on nautical charts as a separate island), Pond (Schoodic), Baker (a portion is in the cultural zone), Bear (a portion is in the cultural zone), Bar/Somes Sound, Heron, Thompson (a portion is in the developed zone), Rum (Long Pond), and no name (Eagle Lake) • Maine critical areas deemed worthy of special planning and management consideration by the Maine State Planning Office • Potential national natural landmarks • Habitat of federally and state-listed endangered and threatened species, including peregrine falcon and bald eagle nest sites • Habitat of Maine species of special concern, species of indeterminate status, and watch-listed species • Significant wildlife habitat as defined in the Maine Natural Resources Protection Act, including habitat for deer, wading birds, shorebirds, colonial seabirds, and Atlantic salmon • Species, habitats, and natural landscape features identified as rare, imperiled, or critically imperiled under the Maine Natural Heritage program • Other important habitat areas identified by the park staff

Zone/Subzone Management Emphasis	**Park Areas (More detailed discussion in Description of the Environment)**
Cultural Zone: Areas managed for the preservation, protection, and interpretaton of cultural resources and their settings, and to provide for their use and enjoyment by the public.	
Preservation Subzone: Preservation and interpretation of historic sites, structures, ethnographic resources, objects, and landscapes that are important because of their aesthetic value and/or their association with personages, events, or periods in human history, and that merit full communication of these values to park visitors.	• Carroll homestead and associated vernacular landscape • Elisha Gilley house and associated vernacular landscape • Sieur de Monts springhouse and environs created by George Dorr • Abbe Museum site • Isleford Historical Museum property • Archeological sites • Old Farm site • Carriage road system and corridor, including roads, bridges, vistas, Jordan Pond gate lodge, Brown Mountain gate lodge (moved to the adaptive use subzone in one of the alternatives) and associated gate lodge landscapes • Loop road system, including roads, bridges, and associated designed landscape • Sargent Drive • Hiking trail system
Preservation/Adaptive Use Subzone: Use, with necessary modifications, of historically significant structures for leasing or for contemporary public and/or administrative activities or functions that permit perpetuation of the qualities that make these resources qualify for listing on the National Register.	• Blue Duck Ship Store • Storm Beach House • Bear Island light station • Baker Island light station • Thunder Hole ranger station

Zone/Subzone Management Emphasis	**Park Areas (More detailed discussion in Description of the Environment)**
Developed Zone: Lands managed to provide and maintain facilities for providing educational and interpretive services; for recreational opportunities, such as campgrounds; for other visitor services, such as a restaurant; for administering and maintaining park resources; and for providing vehicular circulation in the park.	• Headquarters administrative, maintenance, and housing complex • Visitor center • Thompson Island visitor station • Sieur de Monts nature center • Wild Gardens of Acadia • Campgrounds, amphitheaters and seasonal housing at Blackwoods and Seawall • Picnic areas: Pretty Marsh, Bear Brook, Thompson Island, Seawall, and Fabbri • Sand Beach and Echo Lake bathhouses • Swimming beaches at Echo Lake and Lake Wood (artificially created) • Boat launches at Ike's Point, Otter Cove, Eagle Lake, Seal Cove Pond, Jordan Pond • Jordan Pond House restaurant, gift shop, and "tea lawn" • Wildwood Stables barn, corrals and camping area • Park utilities • Gift shop at Cadillac summit • Restrooms associated with the above • Parking areas for all of the above and other designated parking (loop road parking is included in the cultural zone) • Access roads: Duck Brook Road, Lurvey Spring Road, Marshall Brook fire road, Hio Road, road to Wonderland, Man O'War Brook Road, Sieur de Monts fire road, Lake Wood access road, Frazier Point fire road, Duck Harbor/Western Head fire road, Western Mountain fire roads, Long Pond fire road, Valley Cove Road (except in alternative 2), Schoodic Drive, Sand Beach bicycle trail, and Bar Island/Frenchman Bay access drive • Seawall ranger residence • Schoodic ranger residence and access road • Sand Beach House and access road • Other park housing: Harden Farm, Sunset House, Hulls Cove House, and Somes Sound House, and others as acquired

Zone/Subzone Management Emphasis	**Park Areas (More detailed discussion in Description of the Environment)**
Special Use Zone: Lands and waters within the legislated boundary where uses are carried out by other government agencies or private interests; NPS administrative control over the use of lands in this zone is either lacking or secondary to that of another party.	
Roads and Utilities: Provision of transportation and utility service to areas primarily outside of the park.	• State and local road rights-of-way • Municipal water supply pump stations and dams • Utility rights-of-way • Great ponds including Eagle Lake, Jordan Pond, Bubble Pond, Long Pond, Echo Lake, Upper and Lower Hadlock ponds, Seal Cove Pond, Hodgkin Pond, Ripple Pond, Lake Wood, Witch Hole Pond, Hamilton Pond, Breakneck Pond, Aunt Betty's Pond, Somes Pond, the Tarn, Round Pond, the Bowl
Inholdings: Acquisition of private inholdings as available.	• Acquisition parcels specified in the park *Land Protection Plan* (1988)

MAJOR PLANNING ISSUES

CHARACTER OF THE VISITOR EXPERIENCE

Densities and Overall Level of Use

Based on a visitor and resident use survey (Manning 1987), more than one-quarter of the summer visitors and more than one-third of the residents generally find the park too crowded. This indicates that while the majority of visitors and residents are apparently satisfied with present use levels, still a substantial number of people are concerned about crowding. The concern over crowding is much more prevalent among repeat visitors and residents than among first-time visitors. More than half of Acadia's visitors are repeat visitors and most of them return frequently. The perception of crowding is substantially higher among people who participate in activities enhanced by privacy and solitude, such as camping and hiking. While many visitors enjoy high-density social interaction, the expectations of those seeking low-density recreation are often not being satisfied during the peak use season.

Crowding at certain locations during peak use periods is also a concern of management. During the peak visitor season, Acadia's parking capacity is exceeded by the demand at many popular locations. On occasion traffic on the summit of Cadillac Mountain comes to a standstill when vehicles overflow the parking lots on both road shoulders making it impossible for RVs and buses to pass. Sand Beach is one of several other frequently crowded areas where rangers are routinely needed to untangle congestion. Parking has been permitted in the right lane of the one-way portions of the Park Loop Road as a way of accommodating more parking without having to construct new parking areas. However, this practice causes other problems that degrade the visitor experience. Right-lane parking creates hazards for bicycle riders, increases congestion, and intensifies the perception of crowding in heavily used areas of the park, particularly along Ocean Drive (Steinitz 1986). The negative visual impact of cars parked along the right lane of the loop road and in crowded parking areas is substantial (Steinitz 1988). The NPS Transportation Division recently analyzed road congestion in Acadia and determined that the number of cars on Ocean Drive during the peak season regularly exceeds the level acceptable for rural highways.

While crowding is occurring in some areas of the park, other areas remain only lightly used. For example, the trails with large trailhead parking areas and obvious signing are heavily used, leading to severe trail impacts and parking congestion in already crowded sections of the park, while some other trails with limited parking and discreet signing receive little use. The more dramatic scenery of the east side of Mount Desert Island and the ease of traveling the scenic Park Loop Road has always drawn the majority of park visitors. The west side of Mount Desert Island has traditionally been much less developed than the east side, offering an alternative for visitors seeking solitude and naturalness. It has been suggested by some that the park's crowding problems can be solved by dispersing use into these lesser used areas. Others, however, would like to perpetuate opportunities for low-density recreation. Without management, opportunities for low-density recreation will erode throughout the park.

Meanwhile, demands for park access continue to increase. Mount Desert Island is a popular vacation destination within easy reach of eastern population centers. With only 6% of the Maine coast accessible to the public, and with one-quarter of that acreage in Acadia National Park, the park is one of the most intensively used leisure destinations in the Northeast. The past decade has seen dramatic increases in park visitation (52%) and in the number of overnight accommodations in island communities (46%). During this same period the length of the primary visitor season has doubled from 11 weeks in the summer to a 22-week summer/fall season, and more year-round use is occurring every year. Assuming current trends continue, visitation will increase 4.5% to 6% annually. As the population ages, the demand for less strenuous, more social, higher density kinds of recreation dependent on private vehicles and tour buses will presumably grow at a faster rate than the demand for low-density use (Steinitz 1986).

The extent to which the park can continue to accommodate increasing use – if it can at all – needs to be addressed. And how this question is answered will depend a great deal on the desired character of the visitor experience. Either use needs to be managed to ensure that low-density recreational options will remain available, or else incremental growth will result in higher and higher density recreation throughout the park, with the result that visitors seeking solitude and appreciation of pristine natural areas will be increasingly disappointed. Whether such experiences should endure as an important part of the Acadia tradition or should gradually give way to serve a growing population in which the majority of visitors are seeking a different kind of recreation is a major issue to be addressed by this plan. The two sides of this issue are the major premises of two of the alternatives considered in this document.

The potential for friction between park user groups exists on many levels. For example, motorists and bicyclists often compete for use on the Park Loop Road, especially on Ocean Drive and Lower Mountain Road. Tent campers and RV campers are often seeking different kinds of experiences, and tent campers sometimes complain about noise created by RV generators and air conditioners. On the carriage roads, the potential for conflict between carriage riders, horseback riders, bicyclists, joggers, and walkers exists and will intensify as carriage road use increases. The degree to which potentially incompatible uses should be separated and *which* uses should occur and *where* is part of this planning issue.

Management of Visitor Use to Protect Park Resources

The degree to which visitor use will be managed to protect park resources is another issue that is addressed differently in the various alternatives.

Heavy visitor use with limited management and overloaded facilities is damaging some park resources. For instance, overflow parking along roadsides and adjacent to parking areas causes soil compaction and vegetation loss. Many heavily used trails are subject to severe soil erosion. The proliferation of social trails, trampling, and misuse of areas such as heaths, the intertidal zone, and mountain summits contribute to erosion and damage delicate plant and animal communities, probably including rare and sensitive plant species.

On offshore park islands that serve as sanctuaries for nesting birds and mammals, even short recreational visits can negatively affect breeding success. Seals are particularly sensitive to the use of sea kayaks. The growing popularity of this sport and boating in general increases the likelihood of disruption of wildlife at critical times. Increased recreational use by swimmers and boaters could potentially affect the water quality of the lakes and ponds.

Park managers could continue to manage the damage caused by visitors wherever it was discovered, attempting to keep adverse effects on plants and wildlife within acceptable levels, or they could be more proactive, seeking to avoid adverse impacts in certain areas by placing additional management constraints on visitors. Such a program would necessarily restrict visitors' freedom of movement in certain areas of the park and would require additional staffing and funding to enforce such restrictions. The data needed to provide an informed, rather than speculative, basis for restricting visitor access would require extensive research, long-term monitoring, and expanded park staffing and funding.

Eagle Lake, Jordan Pond, Lower Hadlock, and Long Pond are public drinking water supplies. These increasingly popular visitor use areas must be managed to protect the water quality.

Concession Services

The National Park Service must determine the desirable scope of services for Wildwood Stables, which is a concessioner-operated horse stable within the park. The concessioner has offered saddle rides, carriage rides, and horse camping, but saddle riding was suspended for the 1990 season due to high insurance costs. The concessioner also stables privately owned horses of visitors who stay in off-site accommodations.

Horseback riding and carriage rides are the intended and traditional uses of the park's excellent system of carriage roads. However, frequent horse traffic, heavy carriages, and wide rubber-tired hay wagons all hasten deterioration of the roads (Rieley 1989). Active marketing strategies designed to encourage equestrians to bring private horses and carriages to the park may also intensify congestion and deterioration of the roads. The desirable degree of the concessioner's use of the carriage road system must be balanced with use by others, including independent horse owners, bicyclers, joggers, and walkers.

Another issue is whether or not the Thunder Hole gift shop should remain, since its contract will come up for review in 1996. The gift shop contributes to traffic congestion in a popular part of the park. Comments from the public indicate considerable opposition to the presence of gift shops in the park, especially in light of the availability of those services in nearby communities. The gift shops at Jordan Pond House and on Cadillac Mountain are necessary to subsidize the traditional tea and popover service at the Jordan Pond House restaurant.

Abbe Museum

The Abbe Museum of Stone Age Antiquities exhibits artifacts of Maine's native American culture. The trailside museum, listed on the National Register of Historic Places, is located on park land at Sieur de Monts. The museum is privately funded and operated.

When the museum trustees donated the 1.5-acre museum site to the National Park Service in 1927, they reserved the right to use the land for future expansion and to use an unimproved road for temporary purposes only, such as construction. The road is currently used on a daily basis to acccess what has become staff parking that is clearly visible from the trails and museum exhibit areas. The Abbe Museum Board of Trustees is exploring the feasibility of adding an addition two times larger than the existing building to provide an auditorium and properly controlled space for additional exhibits, offices, curatorial work, and artifact storage. Concern has been expressed that tripling the museum's size might strain services and facilities at Sieur de Monts, an already congested and physically confined area. The park's 1986 boundary legislation specifies that expansion of privately owned buildings in the park be limited to 25% of that existing as of November 1985.

SCOPE OF THE RESOURCE MANAGEMENT PROGRAM

Park management has operated for many years with limited funds and without benefit of a legislated boundary or an approved management plan, which has created a number of resource management problems. The current levels of funding and staffing support a modest resource management program focused primarily on repairing noticeable damage to natural and cultural resources on an opportunity basis. No comprehensive, systematic, long-term approach to resource management has yet been implemented in the park. Which aspects of the program should be a high priority for the future is another of the major issues to be resolved by this plan. Notable deficiencies in implementing the resource management program are summarized below.

Cultural Resources

Protection of the aesthetic values of the park loop road: Incremental actions to alleviate traffic congestion – including road widening and straightening, parking lot expansion, right-lane parking, and lack of vegetation management – are eroding the leisurely scenic driving experience the road was intended to provide.

Restoration and maintenance of the carriage roads: Without adequate funding the park has been unable to adequately maintain the carriage roads. As a result they have deteriorated to a point where the road crown and clay binder have been lost and vegetation is beginning to intrude into the road surfaces. Also, most of the 27 documented scenic vistas reported by Rieley and Brouse (1989) have become overgrown. Funding has been sufficient to perform cyclic maintenance on only 1 to 1½ miles over the past four years. Every year use of the carriage roads increases, and accidents related to poor maintenance increase.

Restoration and maintenance of the historic trail system: Heavy use combined with lack of maintenance has resulted in extensive erosion of the historic trails. In several sections granite steps and rungs have been loosened and markers have been lost, creating hazards for visitors. More than 40 miles of trail that once connected the park with surrounding communities have been abandoned.

Evaluation and treatment of historic structures: The conditions of the park's historic structures have not been documented in detail, but casual observations indicate that all the structures require some action to arrest or prevent deterioration.

Cataloging and treatment of the park collections: Fewer than half of the more than 68,000 artifacts in the park collections have been accessioned or cataloged. Pest problems and insufficient and insecure storage are causing artifact deterioration.

Survey, monitoring, and stabilization of archeological resources: The total number of prehistoric and historic archeological sites in the park is unknown. Some sites may be adversely affected by rising ocean levels and vandalism.

Natural Resources

Water resources management: Water quality in most of the park's lakes and ponds is thought to be excellent; however, the effects of acid precipitation (which in the park averages about 10 times more acidic than normal rainfall) are unknown. Marshall Brook, which empties into Bass Harbor Marsh, is recovering from pollution associated with a landfill that was closed in the 1980s. The marsh may also be suffering from pollution caused by improper sewage disposal. Continuing residential, commercial, and park development threatens surface- and groundwater quality parkwide. *Giardia*, a water-born flagellate, is thought to be present in park waters and may cause a public health threat to people who drink out of park streams.

Inventory and management of species and habitats: The park lacks basic information (i.e., inventories of native and exotic terrestrial plants, reptiles, amphibians, mammals, and freshwater fish) needed to understand and protect species and habitats. Park programs and development may be inadvertently affecting natural resources, with the potential for loss of biodiversity. Incompatible development adjacent to the park may also be adversely affecting park ecosystems.

Cooperation with the state of Maine to manage tidal and estuarine resources: The Park Service and the state of Maine share confusing and interwoven jurisdictional boundaries in sensitive tidal and estuarine areas of the park. The deeds for some oceanfront properties extend NPS ownership rights to low water, and others only to high water. Legal authority in coastal marshes surrounded by park lands is confused by difficulty in delineating "tidal waters" under state jurisdiction from "wetlands." The state also has jurisdiction over the 17 great ponds (bodies of water larger than 10 acres) in the park. The state does not prohibit collecting, fishing, hunting, or trapping in areas under its jurisdiction, and there is concern that continued hunting and fishing in areas such as Bass Harbor Marsh may deplete park wildlife populations. These activities inside the park boundary are confusing and irritating to some park visitors. Also there is concern that continued stocking of great ponds with exotic sport fish may disrupt native freshwater systems (NPS 1990c). The state has indicated an interest in undertaking shared inventory and monitoring and cooperative management of great ponds and intertidal areas where park boundaries and state boundaries are interwoven.

Fire management: Some of the park's mature, even-age forests are susceptible to catastrophic fire, such as the fire that burned one-third of the island in 1947. Areas not burned in 1947 retain heavy fuel loads, and fire hazard is high in areas where visitor use is heavy. Additional research on fire history is needed to understand the role of fire in Acadia and to support an effective fire management plan.

Boundary protection: The park boundary line has many irregularities and has not been surveyed or marked. This, coupled with the park's patchwork ownership, makes it difficult for visitors to know if they are on or off federal park lands. Furthermore, because the boundary is not clearly marked and enforced, private landowners have, in some cases, engaged in inappropriate activities on park land.

Threats from private use and development: More than 175 parcels of private land exist within the park boundary and, while these properties will be acquired by the National Park Service on an opportunity basis as funds are available, some will remain in private hands for the foreseeable future. Because of the patchwork nature of landownership, park resources such as wildlife habitat, scenic vistas, and water quality are highly susceptible to damage from activities occurring on private land inside and outside the park boundary. The 1986 boundary legislation imposed development restrictions on inholdings; however, the park has not yet been able to initiate a monitoring program to ensure compliance with those restrictions. Residential and commercial development is increasing adjacent to the park boundary. A 1988 study (Jacobson & Dominie) identified resources important to the park that are unprotected by municipal land use controls or private land conservation efforts. The park holds more than 130 conservation easements restricting the use of private lands outside the park boundary; however, many more important areas are unprotected. Furthermore, an adequate program to monitor conservation easements is beyond the park's current staffing and funding capabilities (Maine Coast Heritage Trust 1988).

NEW DEVELOPMENT

The last major planning issue is the amount of new development needed or desirable in the park. New development is being considered to solve the following existing problems (see the facility analysis in the "Description of the Environment" for additional information about current development problems):

- Lack of a clearly defined primary park entrance with nearby orientation facilities to help visitors plan their stay

- Uncoordinated, sometimes obtrusive, and often inadequate informational signing

- Small, highly congested visitor center with physically difficult access and inadequate environmental controls; open during the summer season only
- Fee collection facility in a different part of the park from the main park entrance
- Overflowing parking lots, which result in some areas in severe traffic congestion, blocking off of bikeways, and destruction of roadside vegetation
- A deteriorating trail system, some segments of which have had to be abandoned because of hazards, and a lack of adequate trail markings and connections between the park and surrounding communities
- Hazardous on-grade crossing of the carriage roads and Park Loop Road
- Outdated and inadequately protected exhibits at the nature center and the Islesford Museum
- Damaged and out-of-date wayside exhibit panels
- Deteriorated campgrounds that do not separate camper types
- Deteriorating historic shelters at the Pretty Marsh picnic area
- Inadequate and unsightly support facilities for the Wildwood Stables concession
- General lack of facilities to support use in late fall and winter
- Need for additional restrooms, some winterized, in heavily used areas
- Inadequate artifact storage facilities
- A severe shortage of park housing and high cost of seasonal housing in the nearby communities, which limits the park's ability to attract the most qualified seasonal employees and to cost-effectively support visiting researchers
- Inadequate and intrusive maintenance facilities

PLANNING HISTORY

Acadia National Park has never had an approved general management plan. Now with the establishment of a permanent boundary for the park, the National Park Service has been able to move forward with the planing process.

PAST PLANS

In the 1940s several attempts were made to develop a master plan under the direction of the park's first superintendent, George Dorr. These plans set the groundwork for much of the road system, the campgrounds, and the visitor center as they exist today, although many of the proposals, such as elaborate downhill ski and winter sports facilities, were never implemented and the plans were never approved.

A combined *Master Plan and Environmental Impact Statement* was prepared in 1978 dealing primarily with proposed solutions to the unresolved boundary issues. It included a recommendation that legislation be enacted to give the Park Service further acquisition authority and the ability to delete and exchange lands to consolidate park resources. The proposal was not given final approval by the Department of the Interior, but it was used as the basis of a mediated agreement in 1979. Many of the basic assumptions of the 1978 master plan, especially the gross underestimation of visitation levels, are no longer valid.

In 1986 the National Park Service proposed to convert the Kebo Mountain Road and Lower Mountain Road segments of the Park Loop Road from two-way to one-way traffic with parking in the right lane. The purpose of these changes was to improve safety, parking, and access for bicyclists, hikers, and motorists. An *Environmental Assessment* was prepared to examine alternative solutions and their impacts. As part of the assessment, a test of the one-way traffic pattern was undertaken in August 1987 to determine effects on the visitor experience and traffic. The test included an extensive traffic counting and analysis program by an NPS transportation planner, a user survey conducted by University of Vermont researchers to determine people's perceptions of the quality and safety of their experience, and a visual assessment by Harvard Graduate School of Design researchers. The *Environmental Assessment* was reviewed by the public. Two public meetings were held and letters were received. The Acadia National Park Advisory Commission also reviewed the assessment and presented their recommendations.

Following this review a recombination of the alternatives was selected for implementation; the one-way pattern was to be implemented for the Kebo Mountain Road segment, while the Lower Mountain Road would remain two-way. On February 24, 1988, a record of decision was signed, detailing the process, alternatives, and reasoning for the selection. The record left the option open to change the decision if, in the general management plan, it was determined that a different solution was preferable for long-range visitor use management.

The Park Advisory Commission recommended that the National Park Service analyze the possibility of a connection between Maine Route 3 and the Park Loop Road, south of the Blackwoods campground, to alleviate traffic congestion on Lower Mountain Road. It was also thought that such a connection would reduce traffic on the town-owned Otter Cliffs Road and provide a shorter, more economically feasible loop for a shuttle bus system. Extensive evaluation of the area was conducted by engineers from the Federal Highway Administration to determine possible alignments for the connection. This was followed by environmental analysis. Because the recommended alignments bisected a significant old growth forest and wetlands, the environmental costs were considered too great to pursue the roadwork. In addition, it was determined that the connection would not substantially affect the success or failure of a shuttle bus system.

GMP PLANNING PROCESS

In anticipation of preparing the current general management plan, a number of actions and studies were initiated to gather planning data. Permanent traffic counters were installed at two locations on the Park Loop Road in October 1986. Elevation, hydrology, transportation, and boundary data were obtained from the U.S. Geological Survey, then reformatted and loaded onto a computer to be used in an islandwide geographic information system (GIS). Vegetation maps were prepared and digitized into the same system by the National Park Service. The Soil Conservation Service, U.S. Department of Agriculture, is in the process of revising the soil surveys of Hancock County.

A visitor use study was conducted (Manning 1987), and a visual quality preference study was initiated (Steinitz et al. 1988). A study of the historic carriage road system and bridges was conducted (Rieley and Brouse 1989) and amended to include recommendations for their use and maintenance (Rieley and Associates 1989). Other studies included a documentation of island resources with high conservation value (Jacobson & Dominie 1988), an evaluation of the park's conservation easement program (Maine Coast Heritage Trust 1988), and an economic analysis of Mount Desert Island (Stellpflug 1990).

At the Park Service's invitation, a Harvard Graduate School of Design landscape architecture class spent a semester identifying issues, projecting trends, and developing three alternative recommendations for the future management of Acadia and Mount Desert Island. Their work was summarized in *Alternative Futures for Mount Desert Island* (Steinitz et al. 1986) and distributed to the public. The students also presented their work to the public at meetings in both Boston and Bar Harbor. These presentations stimulated substantial interest in planning for Acadia, especially the students' projections of a near doubling of visitation by the turn of the century if current trends continue.

In August 1987 the first issue of the *Planning Update* newsletter was distributed to initiate public involvement in the planning process. It included a summary of the issues to be addressed by the general management plan, a schedule for public meetings, a description of the planning process, an invitation for public participation in the development of the general management plan, and a mail-back response form. Many individuals, universities, and local, state, and national agencies received copies of this newsletter and those who indicated an interest were placed on a mailing list to receive future planning information.

Public scoping meetings/workshops were held in August 1987 at three locations on Mount Desert Island. The purpose of these meetings was similar to the purpose of the newsletter. Participants were invited to review the National Park Service's proposal for the scope of the plan, offer additions or deletions, and voice opinions regarding issues, problems, and opportunities for park management over the next 10 to 15 years. At each meeting groups wrote and drew on maps to indicate problem areas, areas needing preservation, and areas providing visitor opportunities. Other ideas were recorded on newsprint. A similar process was followed with the park's permanent and seasonal staff. The preliminary issues addressed by the planning team were modified in response to some of the concerns expressed.

A second *Planning Update* was distributed in May 1988. It summarized public responses to the previous round of information, presented preliminary alternatives based primarily on transportation options, and announced upcoming public meetings. Since only a few nonlocal park visitors had attended the public meetings, a special issue of the *Planning Update* was compiled to solicit visitors' opinions. This newsletter was distributed at the park campgrounds, the visitor center, and interpretive programs. Summaries of the public responses are included in appendix C.

As the alternatives were being formulated and reviewed, it became clear that several areas were potentially controversial and that implementation of the preferred alternative would require substantial cooperation between the National Park Service, the surrounding communities, state agencies, and several other groups. For that reason, An *Alternatives Document* was published and distributed in the summer of 1989 to briefly describe the alternatives, gauge the degree of controversy, and solicit commitments of support for the preferred alternative. In addition to public meetings on Mount Desert Island and in Bangor, meetings were held with the boards of selectmen of each of the four island towns, the park's advisory commission, and representatives of various state agencies. Additional presentations were made to several other special interest groups.

Some of the preliminary alternatives under consideration in 1988–89 would have restricted access to the park based on a determination of design capacity for the Park Loop Road. However, during the public review of the *Alternatives Document*, the rationale and methodology underlying this concept were questioned, and upon further analysis were determined to be deficient. Under the preliminary alternative entitled "Restricted Access" vehicular access to the loop road would have been limited to three key locations with control stations, and once the maximum acceptable number of vehicles was reached, these three control points would have been closed. The maximum acceptable number of vehicles for the loop road was proposed to be level of service D as defined by the Federal Highway Administration.[1] Based on visitation projections and the standard level-of-service formulas, use of the park loop road could be high enough to indicate level of service D as early as 1991. The major problem with this concept is that the available formulas for determing level of service are not applicable to roads with low speed limits, such as the Park Loop Road. All the level-of-service formulas are based on roadways with a minimum speed of 50 miles per hour. The speed limit on the Park Loop Road ranges from 25 to 35 miles per hour, which significantly increases its carrying capacity. No standards have been developed for roads with speed limits lower than 50 miles per hour. Thus, no standards exist for knowing when the Park Loop Road has actually reached level of service D. In addition, several roadways within the national park system have operated at level F, or breakdown, before any restrictions have been placed on them, if restrictions have been imposed at all. There is no precedent for imposing such restrictions without proof of environmental damage (as has been documented at Denali National Park). For these reasons, the concept of restricting access based on the capacity of the Park Loop Road is no longer being considered.

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1. Six classes are used to define levels of service ranging from A through F. Levels A and B are optimal. Level C is defined as stable and acceptable for rural highways. Level D is stable but high density and acceptable for urban settings. Level E is usually unstable, at or near capacity, and generally unacceptable. Level F is breakdown, when capacity is exceeded and traffic flow stops.

PART TWO: ALTERNATIVES

ALTERNATIVE 1: DISPERSED USE

OVERVIEW

Alternative 1 would disperse use more evenly throughout the year and throughout the park to accommodate a modest increase in visitor use. The success of this concept would depend on a collaboration between the National Park Service and local communities to cooperatively manage tourism and growth in a way that would minimize the expansion of peak season visitation and protect mutually important natural, scenic, and cultural resources.

The major premise of this alternative is that crowding and congestion in the park are primarily the results of too many parked automobiles. While the park roads and parking lots are often filled beyond their capacities, once one moves away from the roads, the park is not crowded. Under this alternative, existing parking capacities would be strictly enforced, and cars would not be permitted to overflow into the roadways. Alternative means of access would be developed, including a shuttle bus system and bikeways and walkways from the surrounding communities into the park. Simultaneous with the establishment of a shuttle bus system along the loop road, parking in the right lane would be eliminated. This would improve the scenic drive experience and safety for bicyclists. As long as there was only a modest increase in the number of visitors per day in the peak season and the season spread out in length, the park would not reach or exceed its carrying capacity with the actions described in this alternative.

Since most visitors to Acadia National Park stay overnight, the level of peak season visitation is directly related to the number of overnight accommodations available in the immediate area. The National Park Service would collaborate with the local communities to slow the rate of increase in peak season visitation while providing incentives for a longer visitor season. This would be accomplished through land use ordinances that would slow the rate at which overnight accommodations could be added and through active tourism management, both of which would be primarily the responsibility of the private sector. The National Park Service would facilitate this effort by enhancing and publicizing its services and facilities in the spring, fall, and winter.

Use would be dispersed throughout more of Mount Desert Island as well as throughout more of the year. Hikers would be encouraged to spread out to what are now the lesser-used trails. Bicyclists, walkers, joggers, and equestrians would be encouraged to disperse throughout the carriage road system. Abandoned picnic facilities on the west side of Mount Desert Island would be reestablished, vistas would be cleared, and access would be improved to encourage more visitors to disperse to that area. Construction of a new visitor center, connected to the existing building, would play a critical role in informing visitors about recreational opportunities in less heavily used areas of the park.

Resource management would be proactive, with emphasis on systematic data gathering, interagency assessment of needs, and coordinated response to internal and external threats. The needs for research and monitoring of the park's natural and cultural resources would be described and prioritized. Assistance from various state agencies would be enlisted to collect baseline data, manage great ponds, and designate protected areas along the intertidal zones to ensure protection of the flora and fauna. Research and monitoring needs that did not receive NPS or state funding would be described to faculty and students of local and national universities to encourage supplemental research projects. The park staff would prevent disturbance to wetlands, state-designated critical areas, and other sensitive resources; control exotic plants posing an immediate and obvious threat to visitors or resources; and comply with section 7 of the Endangered Species Act.

A substantially greater emphasis would be placed on the park's wealth of cultural resources. Interpretive displays would be expanded to address cultural, as well as natural, resources. A cultural resource division equal in size, scope, and funding to the science and natural resource division would be established to manage the park's collections, archives, historic structures, and cultural landscapes. Facilities to properly store, preserve and work on the collections and archives would be constructed.

The Park Service would collaborate with the surrounding communities to protect natural, cultural, and scenic resources located outside the park boundary but significant to the perpetuation of the natural systems, scenic quality, and cultural heritage of the park and region. The park staff would share its computerized geographic information system and other inventories, manpower, tools, and training to help towns develop comprehensive plans and ordinances that recognized and protected these resources. The local college and universities would also be asked to share in this effort.

Major emphasis would be placed on the rehabilitation of the carriage road and hiking trail systems. This would be coupled with an increase in staff to maintain the roads and trails once they were restored. Horse stabling, employee housing and visitor services at Wildwood Stables would be improved. Carriage rides for park visitors would remain the primary focus of the concession operation. This service would be expanded to include excursion carriage rides, in small carriages, departing from the Brown Mountain gate lodge. The Wildwood concession would provide expanded camping, stabling, and staging facilities for those visitors who brought their own horses and carriages. These actions, coupled with an exhibit on the history of the carriage roads in the Brown Mountain gate lodge, would spark renewed interest in the carriage roads and help ensure their restoration and proper maintenance.

VISITOR EXPERIENCE

The following actions would allow a moderate increase in visitor use while reducing most visitors' perceptions of crowding.

Disperse Use Throughout More of the Park and Throughout the Year

Manage islandwide tourism to accommodate a modest increase in visitation during the peak season and to promote growth during the off-season. The park would participate in islandwide forums to coordinate planning on Mount Desert Island, utilizing both formal and informal arrangements. Funding for technical planning assistance would be jointly sought to address issues of concern shared by the park and communities. These would include land-use ordinances to slow tourism during the peak season by limiting additional overnight accomodations and other tourism management strategies that would promote growth in park visitation during the off-season.

Improve access, orientation, and information by providing a new entrance gateway and visitor center at Hulls Cove. A gateway and visitor center would be developed near the primary entrance to the park at Hulls Cove to welcome visitors and provide adequate orientation and information. A critical design and program requirement at the visitor center would be to orient visitors to the recreational and interpretive opportunities available in less heavily used areas of the park and to inform them of their transportation options.

Rehabilitate the carriage road system. The carriage road system would be rehabilitated to make it more attractive, safer, and easier to use. A portion of Duck Brook Road would be designated for bicycle use only to make more of the system easily accessible to bicyclists. A new trail for hiking, bicycling, and skiing would be constructed to connect the community of Bar Harbor and Sieur de Monts to the Eagle Lake carriage road. Other new trail connectors, such as a route over Youngs Mountain between the high school and Duck Brook Road, would be studied and constructed if feasible.

An additional parking lot and access trail would be provided at Eagle Lake to provide adequate access to a convenient and popular portion of the carriage road system. Bicyclers, joggers, walkers, cross-country skiers, and visitors using wheelchairs could take better advantage of the easy grades and loop routes. To minimize the number of spaces used, bicycle rental companies serving groups would be encouraged to shuttle patrons to the trailhead. More spaces in the existing lot would be designated for handicapped use.

Expand and upgrade the trail system and direct hikers to less heavily used trails; mitigate impacts in sensitive or overused areas. Greater use of the hiking trails into the interior of Mount Desert Island would be encouraged. Abandoned trails offering access from areas with sufficient parking or the chance to create loops in heavily used areas would be rehabilitated. Because state highways are particularly suited to carry larger volumes of traffic than the park roads, the lesser used trails along State Route 3 between Sieur de Monts and Otter Creek would be more clearly marked and marketed by the interpretive staff as alternatives to some of the crowded trails. In addition, a new trail would be constructed from Route 3 near the Otter Cliffs road to the Champlain Mountain trail network to help disperse use from the Park Loop Road.

Reestablish Western Mountain picnic areas to serve increased use on the west side of Mount Desert Island. The picnic areas at Pine Hill and Oak Hill would be reestablished to help disperse visitors to the west side of Mount Desert Island. The dirt access roads to these sites would be upgraded but not paved. Restrooms would be provided.

Retain opportunities for low-density recreation on Schoodic Peninsula and the offshore islands. Schoodic Peninsula and the offshore islands would not be actively marketed, nor would additional facilities be provided in these areas. The intent would be to retain current use levels and the existing naturalness and solitude of these parts of the park.

Make Sieur de Monts a year-round entrance to the Park Loop Road and plow to Ocean Drive. One lane of the Park Loop Road between Sieur de Monts and the Otter Cliffs Road would be plowed in winter. This would make twice the length of road available to cars in winter, while providing a convenient winter entrance and reducing use of Bar Harbor's Schooner Head Road. The unplowed lane would continue to be available for skiers and snowmobilers. Winter activity maps and brochures would be made available at Sieur de Monts, and the restrooms would be converted to year-round use. The nature center would be winterized and used as a staging area for off-season interpretation programs and environmental education. The nature center could also be staffed on weekends if visitation warranted. Located at the beginning of the plowed park road, Sieur de Monts could evolve into a focal point of winter outdoor activity.

Enhance the existing staging area for winter recreation at Hulls Cove. New winterized restrooms would be installed at the plowed parking area.

Open a park concession facility during the skiing season. The National Park Service and the Acadia Corporation (the concessioner that runs the Jordan Pond House and gift shops in the park) would explore the feasibility of opening the kitchen and lounge of the Acadia Corporation dormitory near Jordan Pond for winter use as a warming hut for cross-country skiers and snowmobilers.

Provide public restrooms at Thunder Hole, Eagle Lake, Acadia Mountain, and Lake Wood.

Implement a comprehensive sign program in cooperation with surrounding communities. The park would cooperate with municipalities and the state of Maine to design and implement a comprehensive road sign plan for Mount Desert Island and Schoodic Peninsula. The plan would reduce the number of signs inside and outside the park, yet clearly and safely direct motorists, bikers, hikers, and other visitors to desired destinations. A complementary system of trail signs would be developed by the National Park Service.

Reduce Perceptions of Crowding by Reducing the Number of Parked Automobiles and by Regulating Use

Encourage public transportation on Mount Desert Island and establish a park shuttle bus. Manning's survey (1987) and comments at public meetings indicated strong public interest in instituting a shuttle bus system as a way of reducing congestion and avoiding construction of any more roads or parking areas, thereby protecting environmental quality. The National Park Service would actively participate with municipalities and others on Mount Desert Island to offer tourists and residents an islandwide bus system with connections to a park shuttle bus system. Once a bus system was successfully operating in Bar Harbor, a federally subsidized shuttle bus system would be implemented between Bar Harbor and the Cadillac Mountain summit. Additional routes would be added as feasible once the shuttle bus was established. They might include a route from Bar Harbor to the Jordan Pond area (which would require that the Lower Mountain segment of the loop road remain two-way), a route to Sand Beach, and eventually a route around the entire loop road. Legislative authority would be sought to provide line-item financing or to direct park entrance fees to subsidize the shuttle bus. By implementing the shuttle bus system in conjunction with public transportation in the towns, visitors could leave their vehicles in motel parking lots or staging areas outside the park. Staging areas would not be constructed on park land.

Limit parking to what can be accommodated in the existing parking lots (except at Eagle Lake and Wildwood Stables). Parking would be eliminated immediately from the right lane of the Park Loop Road wherever road geometry posed a safety hazard, such as on the Kebo Mountain Road. Once a shuttle bus system was in place, all right-lane parking would be eliminated. This would enhance the scenic drive experience by removing the safety concerns, traffic flow restrictions, and visual impacts associated with parking in the right lane. Parking would be permitted only in designated spaces in established lots, and vehicle size would be restricted in lots where turning space was limited. Overflow parking would be eliminated from highways through enforcement of no-parking restrictions. Popular facilities along the Park Loop Road would demand regular patrol. The cooperation of the state and towns would be sought for roads where the park does not have jurisdiction. This would be necessary particularly at Echo Lake Beach and Acadia Mountain, because when these lots are full, cars overflow onto State Route 102.

No new parking areas would be permitted along the Park Loop Road, and no existing parking areas would be expanded except the lot at Wildwood Stables (see below). Visitors would be encouraged to travel the loop road as a scenic drive or to use alternative access, including the shuttle bus, trail links, carriage roads, parking lots on state highways, and bicycle routes.

Encourage the development of bike lanes along state highways. The National Park Service would support the widening of road shoulders to provide ample room for bike lanes as part of the systematic rehabilitation of state highways on Mount Desert Island and through the park.

Establish rules for users of the carriage roads. Different types of users of the carriage roads (carriage riders, equestrians, bicyclists, and pedestrians) would not be segregated but would abide by specific rules of the road that would be published and distributed at entrances to the system, at bike shops, and at Wildwood Stables. Bicyclists would be expected to stop and let horses and carriages pass and to warn walkers as they approached.

Limit the size of recreation vehicles on the summit of Cadillac Mountain and prohibit RVs on the Park Loop Road while the shuttle bus is operational. Size limits for RVs would be instituted on the segment of the Park Loop Road to the Cadillac Mountain summit when the shuttle bus system was operational. RV access would also be restricted during the peak season on the rest of the road when the shuttle bus was operational. With enforcement of parking restrictions, some parking areas now utilized by RVs would no longer be available to them.

Separate tent camping from RV camping. A portion of the Blackwoods campground would be redesigned to better accommodate RV users in an area separate from the tent camping area.

Increase Concession Services

Expand horse and carriage concession services and improve the Wildwood Stables. The stable operation would be expanded to support greater equestrian use of the carriage road system by concession patrons and people bringing their own horses. The concessioner would continue to offer carriage rides. Saddle horse rentals would also be appropriate but would only be provided if they were economically feasible. Horses and small carriages would be permitted on all park carriage roads except Witch Hole Pond and most of Eagle Lake (the 1.4-mile section at the south end of Eagle Lake that connects the Bubble Pond area with the Jordan Pond carriage road would be open to horses and small carriages). Large carriages would only be permitted on the Day Mountain loop and between Wildwood Stables and the Jordan Pond House.

A second staging area for concession-operated carriage rides would be provided at the Brown Mountain gate lodge. One tower of the gate lodge would be used to sell tickets. Small (four- to six-passenger) carriages would depart from the gate. Horses and carriages would be transported to and from this area by trailer from Wildwood Stables so that no overnight facilities would be required.

The Wildwood Stables concessioner would be required to equip carriages and hay wagons with metal wheels and impose weight limits. In addition, the concessioner would be required to pick up horse manure and perform routine maintenance of the road surface. To minimize conflicts with other park users, carriage-driving and equestrian events would be scheduled only during May, June, October, and November, and only if the carriage roads were sufficiently dry to avoid damage to the road surface.

The existing number of stalls would be approximately tripled and would be shared among the concessioner and private equestrians. All visiting equestrians (including campers) would be required to stable their horses in covered stalls rented from the concessioner.

Open a park concession during the skiing season. See the discussion of winter use, above.

Improve the efficiency of the Jordon Pond House restaurant. The restaurant kitchen facilities would be expanded to improve the efficiency of the traditional tea and popover service.

Close the gift shop at Thunder Hole. The gift shop at Thunder Hole does not provide Acadia Corporation with a significant portion of their profit and would be closed in 1996. The structure, which is historically significant, would be used for interpretive purposes. The gift shop operations at the Cadillac Mountain summit and Jordan Pond House would be retained. All sales items would relate directly to visitor education.

CULTURAL RESOURCE MANAGEMENT

The following actions would address the scope of the cultural resource management program.

Protect the Aesthetic and Historic Values of the Park Loop Road

Protect and enhance the original design intent of the historic Park Loop Road. The loop road corridor would be designated a cultural landscape and nominated to the National Register of Historic Places. The landscape would be managed to protect the integrity of the carefully designed and constructed road. Sixty-seven views from the Park Loop Road, as documented by Whittaker in 1961, would be selectively maintained according to the guidelines described by Lange (see appendix D, "Park Loop Road Vistas").

The design character and specific features would be retained, including the road width and the granite coping stones, retaining walls, and gutters. New construction would be kept to a minimum and utilize materials harmonious with the originals. With the exception of parking for Wildwood Stables, no new parking would be added to the loop road. The asphalt gutters installed along the Cadillac Mountain Summit Road would be removed and the stone gutters rehabilitated or replaced. The dangerous paved bike lanes on the approach to the Cadillac Mountain Summit Road would be removed to improve safety. Roadside mowing would occur infrequently, but often enough that motorists could see the coping stones. The mowing of road shoulders would be kept to a minimal width. The traffic islands at Bubble Rock and the Precipice would be planted with woody vegetation to obscure parking and add to the sense of naturalness. Further research into the recently compiled drawings and correspondence from the Frederick Law Olmsted National Historic Site and the Library of Congress would clarify specifics of the original design intent, materials, and techniques.

Rehabilitate and Maintain the Historic Carriage Road and Trail Systems

Rehabilitate the carriage roads and reestablish the vistas. A major carriage road rehabilitation program would be undertaken, followed by a realistic and comprehensive maintenance program. Procedures and specifications for such a restoration, based on the report "Recommended Guidelines for the Restoration, Maintenance and Use of the Carriage Roads at Acadia National Park" by Rieley & Associates (1989b), are contained in appendix E. The guidelines are subject to modification resulting from further research.

According to Rieley (1989b) the carriage roads were designed to take advantage of *hundreds* of sweeping views of lakes, mountains, bay, and ocean. Reopening the 27 documented carriage road vistas reported by Riley would be the first priority, but a cultural landscape report/treatment plan would also be conducted to determine locations of other obvious but undocumented views, establish guidelines for their reestablishment and long-term maintenance, assess the condition of the roadways, and lay out specific strategies for roadway and bridge rehabilitation and maintenance.

Improve trail maintenance. Erosion and safety problems would be prevented by maintaining trails to a higher standard through routine and cyclic maintenance. Programs would be developed to take better advantage of volunteers in maintaining the park's trail system.

Preserve and Adaptively Use Historic Structures

Evaluate, treat, and maintain historic structures. Historic structure reports would be conducted to evaluate and recommend and prioritize treatments for the more than 70 structures listed or eligible for listing on the National Historic Register of Historic Places. A cyclic maintenance plan would be established to monitor, stabilize, and preserve historic structures. Treatments recommended in the historic structure reports would be implemented with specialized personnel, as appropriate. A high priority would be placed on the evaluation and treatment of the carriage road bridges and gatehouses as part of the effort to rehabilitate the carriage roads.

Adaptively use three historic structures for interpretive programs. The Brown Mountain and Jordan Pond gate lodges and the building at Thunder Hole (which was originally built as a ranger station and is now used for the gift shop) would be adapted for interpretation. The Baker Island lightkeeper's house would be used for employee housing (see "Development").

Open the historic Carroll homestead grounds to the public on a reservation basis. A self-guiding walking tour of the grounds would be open for the public on a reservation basis.

Continue preservation of the Bear Island light station through the historic leasing program.

Maintain Artifact Collections to NPS Standards

Catalog and treat the park collections. The more-than-half of the park's artifacts that have not been documented would be accessioned and cataloged. Storage for all the artifacts on Mount Desert Island would be consolidated in a single facility with adequate environmental controls and security at the park headquarters. An addition would be added onto the Islesford Historical Museum to provide proper storage for that museum's collections. The new collection storage facilities would be constructed to prevent deterioration, provide artifact security, and make artifacts readily retrievable for appropriate research and interpretive uses.

The staff would conduct preservation, collection, and maintenance work and document the locations, scope, and sizes of Acadia's natural history and archeological collections currently distributed among colleges and universities nationwide. These collections would be retrieved by the National Park Service, then where appropriate, they would be returned to the various repositories.

Protect Archeological Resources

Survey, monitor, and stabilize archeological resources. A comprehensive archeological survey would be conducted to document and describe sites and study their potential for degradation from rising sea level, vandalism, or other causes. Based on information developed through this survey, an archeological resources management plan would be prepared to direct actions to protect archeological resources.

NATURAL RESOURCE MANAGEMENT

Improve Air and Water Quality

Monitor air quality and work to eliminate and prevent problems. The park staff would continue to work with the Environmental Protection Agency and the Maine Bureau of Air Quality Control to monitor air quality conditions, including ozone, sulfur dioxide, particulate matter, and visibility. The National Park Service would cooperate with these agencies and other states to develop emission control strategies to diminish existing and prevent future visibility impairment at Acadia.

Participate in regional air quality regulatory programs. The park staff would participate in Maine's and other state air-quality-related permit reviews, rule-making, and planning by advising about potential impacts on park resources. This would be part of an effort to reduce the threat to resources and human health.

Report findings clearly to the public. When pollution episodes occurred in which state or federal health standards were exceeded, visitors entering the park would be advised of the risks to their health so that they might make informed decisions.

Develop and implement a comprehensive water resource management plan. In consultation with federal, state, and local agencies, the park staff would compile results of past water quality research in the area, identify needs for additional baseline data, collect necessary information, identify potential threats to water quality, and develop a long-term interagency monitoring and research strategy. Research would identify sources and extent of water pollution including potential effects of additional development, examine effects of pollution on public health and park resources, and implement strategies to mitigate problems.

Expand water quality monitoring. Pollution of Marshall Brook and Bass Harbor Marsh by landfill leachate, seasonal algal blooms on park lakes, the effects of acid precipitation, radon contamination of drinking water, and threats posed by incompatible commercial and residential development would be examined.

Avoid occupancy and modification of floodplains. The park staff would develop and coordinate emergency evacuation plans in cooperation with local law enforcement agencies, the state of Maine, and the National Weather Service.

Cooperatively Protect Species and Habitats of Value to the Park

Take the lead in coordinating a collaborative effort of research, monitoring, and planning needed to understand and manage resources of value to the park. The park staff would identify and prioritize research needs and undertake the highest priority projects as funding allowed. The Park Service would cooperate with other public and private agencies, colleges, and universities to direct additional baseline inventories and monitoring. Data would be gathered on terrestrial plants, reptiles, amphibians, mammals, freshwater fish, and invertebrates, placing special emphasis on endangered, threatened, rare, or exotic species. Research would be conducted to analyze the impacts of hunting, trapping, and fish stocking on lands and waters adjacent to the park. The park staff would play a lead role in active interagency management programs, such as the possible reintroduction of extirpated species and management of great ponds fisheries.

Protect and enhance habitat for species of special concern. The National Park Service would cooperate with the U.S. Fish and Wildlife Service to comply with section 7 of the Endangered Species act. All proposed development sites would be reviewed for the presence of threatened and endangered species. Compliance procedures would include provision of buffer areas to prevent development and use around nesting sites of bald eagles and peregrine falcons.

The park staff would assess the feasibility of active management to increase populations of species of special concern whose presence in the park is jeopardized by limited distribution or limited numbers.

Implement the park's integrated pest management plan. Problems with native or exotic species would be addressed with sensitive solutions that protected important resources.

Establish and work to implement mutual goals with state agencies where state jurisdiction directly affects park resources. The intertidal zone would be designated as a protected area. Concurrent jurisdiction would be instituted to regulate visitor use and collecting. The state would be asked to restrict hunting and trapping and to stock native rather than exotic species in ponds, or possibly to not stock at all. This would also require coordination with the local rod and gun clubs.

Communicate research data to the public. Increases in resource management staff would allow scientific research data on species and habitats to be made readily available to park interpreters. Interpreters would be able to present relevant scientific research information in their public presentations to help protect park resources and achieve management objectives. Other interested agencies would be kept informed of research findings.

Manage fire to protect life and property and to perpetuate fire-dependent ecosystems. The park staff would prepare and implement a park fire management plan that would clearly articulate vegetation and fuels management objectives. The purposes of this plan would be to assure the protection of human life and property and to research and restore or simulate the natural role of fire in the development and perpetuation of park habitats. Based on research, the fire management plan would determine if prescribed burning, prescribed natural fire, or some other means was necessary to perpetuate fire-dependent ecosystems, such as heaths.

The park staff would work with the Maine Division of Forestry and other agencies to assure preparedness should a catastrophic fire occur. As part of that preparedness, preemptive or "presuppression" actions might be taken to reduce fuel levels and control potential fire behavior at tactical locations. Presuppression actions could include mechanical thinning of accumulated debris and growth, and use of prescribed fire under carefully controlled conditions. Such actions would be applied sparingly, with rigorous consideration of impacts on other park resources, surrounding communities, and aesthetics.

The National Park Service would work with local communities to reduce the threat of fire from sources external to the park by adopting the kinds of zoning, building codes, public education, and fuel-management policies that would discourage potential ignition or fire damage.

Work with Adjacent Landowners and Communities to Enhance Park Values

Survey and mark the park boundary. A comprehensive boundary survey would be conducted and park lands would be clearly marked.

Develop cooperative relationships with local building code enforcement officers. The park staff would work closely with local code enforcement officers to help monitor proposed construction activities on inholdings. These activities would be monitored for compliance with guidelines intended to ensure that park resources were not damaged by development. The guidelines are included in the *Land Protection Plan* (1988).

Offer technical planning assistance to local towns. The park staff would offer technical assistance to town comprehensive planning committees by sharing the park's GIS data base and the mapped inventory of important scenic, natural, and cultural resources as contained in the Evaluation of Island Resources (Jacobson & Dominie 1988). These include watersheds, wildlife habitat, key vistas, and historic sites.

Cooperate with local land trusts to institute a proactive conservation easement program and establish a base-funded conservation easement monitoring program. Priorities would be based on the *Evaluation of Island Resources* (Jacobson & Dominie 1988). Base funding and permanent staff would be needed to fully implement the recommendations of Maine Coast Heritage Trust's study (1988) and to play an active role in community education regarding the value of the conservation easement program.

STAFFING REQUIREMENTS

Additional positions required under this alternative are shown in appendix F.

DEVELOPMENT

General

Reflect Acadia's architectural tradition in all new visitor facilities. New visitor facilities would be characterized by steeply pitched roofs and rustic native materials, including unpainted wood and rough-cut granite. Rehabilitation and replacement of existing structures would conform to this style.

Provide additional facilities for visitors with disabilities. Where feasible, accessibility would be improved at prominent park features (such as the Cadillac Mountain summit), restrooms, campsites, and picnic areas. Park shuttle buses would be equipped with wheelchair lifts. A captioned orientation film and tactile exhibits would be provided at the visitor center.

Provide park development only in specific areas on Mount Desert Island. Except for those facilities listed below, no additional development would be permitted in the park. Existing facilities currently in use would be repaired or replaced as needed. Unpaved roads would not be paved, widened, or upgraded except as noted above to provide access to the Pine Hill and Oak Hill picnic areas.

Interpretive Facilities

- Provide a new park gateway and year-round visitor center. An entry gateway and new visitor center would be constructed at Hulls Cove. The new visitor center would be constructed adjacent to the existing parking lot to provide adequate space for both interpretation and orientation functions and to overcome existing mechanical problems. If feasible, it would be physically connected to the existing visitor center, which would be adapted for use as a museum, education center, or similar support facility. A critical function would be to provide information on visitor activity options, parking and shuttle bus operation. Accessible restroom facilities would be available year-round.

- Replace the nature center exhibits. New exhibits would present a unified message and employ creative participatory techniques to bring information to visitors in a dynamic and appealing manner.

- Adaptively use the Brown Mountain gate lodge as an exhibit area for interpreting the carriage roads and a staging area for excursion carriage rides. Adaptive use of this national register property would require compliance with section 106 of the National Historic Preservation Act. The Brown Mountain gate lodge might also be used as a staging ground for off-season interpretive programs and environmental education activities.

- Adaptively use the Jordan Pond gate lodge for interpretive exhibits. The gate lodge at Jordan Pond would be converted to exhibition space interpreting the park's natural and cultural features.

- Convert the gift shop building at Thunder Hole to an exhibit area highlighting life in the intertidal zone and the Gulf of Maine. The building would house a small, self-guiding exhibit highlighting the fragility of the nearby intertidal zone. An emergency radio phone would be installed in the structure.

- Replace the Islesford Historical Museum exhibits. New exhibits would reflect the importance of the collection, and artifacts would be protected from environmental deterioration.

- Revise the park's *Land Protection Plan* to accommodate an expansion of the Abbe Museum. The revision would be contingent upon coordinated programs to avoid exacerbating congestion at the Sieur de Monts area. This action would not, however, exempt the museum from condemnation under the boundary legislation. If the expansion exceeded the 25% specified in Public Law 99-420, the museum could not be guaranteed protection from future acquisition without an amendment to the legislation. In order to preserve the pastoral setting of this trailside museum, use of the access road would be restricted to loading and unloading large or fragile objects or when needed for structure maintenance.

- Upgrade and replace wayside exhibits.

Carriage Road and Trail Systems

- Rehabilitate the historic carriage road and trail systems. See "Cultural Resources."

- Construct a carriage road bridge over the Park Loop Road at Bubble Pond. To eliminate the hazard of an on-grade crossing with the loop road system, a bridge would be constructed over the loop road to accommodate horses and carriages. The bridge would be designed with appropriate granite facing to harmonize with the other carriage road bridges.

- Reroute the trail connecting the visitor center to the carriage road at Paradise Hill. Rerouting the trail would reduce the grade and make it safer for skiers and bicyclists.

- Construct a new trail connector from Bar Harbor and Sieur de Monts to Eagle Lake carriage road. The new trail would follow one of the two alignments laid out for John D. Rockefeller, Jr., by Frederick Law Olmsted, Jr., Associates, for the only portion of the carriage road system that was never built.

- Rebuild the trail from Route 3 to Champlain Mountain. The trail would follow the approximate route of an abandoned trail and utilize an existing parking lot at the trailhead.

- Construct additional parking at Eagle Lake. A significant wetland nearby would prevent expansion of the existing lot; therefore, additional parking would be constructed west of the existing lot on State Route 233, carefully sited to screen it from the loop road and Cadillac Mountain. A trail connecting this parking area to the carriage road would also be constructed.

Campgrounds and Picnic Areas

- Rehabilitate campsites. Soil compaction and drainage problems would be addressed at specific sites, as necessary. The placement of camping equipment at each site would be clearly designated, and the fire grates at the Seawall campground would be repaired. The rustic appearance of park campsites would be retained by avoiding the addition of pavement at any sites except designated handicapped sites.

- Redesign a portion of the Blackwoods campground for RVs. Specific roadways and campsites would be redesigned to accommodate RVs up to 35 feet, to prevent RV damage of vegetation, and to ease site access. To avoid enlarging the area disturbed by the campgrounds, the total number of campsites might be reduced to accommodate fewer RVs more adequately.

- Rehabilitate the Pretty Marsh picnic area. The historic picnic shelters would be repaired in a manner consistent with the original design specifications. A proposed nomination of the structures to the National Register of Historic Places contains reference to the design specifications. The picnic sites would be made level.

- Reestablish the Western Mountain picnic areas. Picnic sites with fire grates and picnic tables would be developed at Pine Hill and Oak Hill. Vistas would be cleared. The unpaved access roads from Seal Cove would be upgraded, but not paved. Restrooms would be provided.

Concessions

- Upgrade the Wildwood Stables. A new barn would supplement the existing 15-stall barn. It would include 10 box stalls (convertible to 20 straight stalls) for guest horses and 18 new stalls for horses used by the concessioner. A new ticket sales/reception area would be constructed. A new paved parking lot would accommodate 55 cars and 10 trailers. New, separate restroom and shower facilities would accommodate visitors/campers and employees. Camping facilities for visiting equestrians who bring their own horses would be upgraded, and fees would be increased accordingly. An employee dormitory for a maximum of 20 employees and an employee dining facility would also be constructed.

- Rehabilitate the Brown Mountain gate lodge for exhibits and a carriage concession. The first floor of the gate lodge would be converted into an exhibition space interpreting the history of the carriage roads. One tower in the gate would be used to sell tickets for concession-operated excursion carriage rides leaving from the gate lodge. A public restroom would be provided. The building would be made accessible to all visitors, including people with disabilities.

- Expand the Jordan Pond House kitchen facilities. The facility redesign would be contingent on NPS approval.

Miscellaneous Visitor Facilities

- Construct permanent restrooms at Wildwood, the Eagle Lake boat launch, the Eagle Lake parking area, Lake Wood, the Acadia Mountain parking area, and Thunder Hole. In order to minimize impacts, restrooms would be small, self-contained or pump-out facilities. The restrooms at the Eagle Lake parking area would operate year-round.

- Winterize restrooms at important staging areas for wintertime park users. The restrooms at Sieur de Monts would be converted to year-round facilities. The new visitor center at Hulls Cove would provide winter accessible restrooms for snowmobilers and skiers. The restrooms on Cadillac Mountain summit would be retrofitted to extend use into the spring and fall.

Administrative Facilities

- Replace the current fee station at Sand Beach with a new facility in the same location. The new structure would be consistent with the park's architectural style, would be vandal-resistant, and would provide temperature control. Pole mounted, high-intensity floodlights would be replaced by less intense lights located on the buildings themselves.

- Construct an artifact storage facility at the park headquarters. The facility would provide secure storage and sufficient work space for cultural resource staff.

- Construct an addition onto the Islesford Historical Museum to store museum artifacts. The addition would also provide sufficient work space for a curator, a museum technician, and museum attendants.

- Replace the maintenance facilities at park headquarters. The unsightly prefabricated metal gymnasium and leaking cement block building would be replaced with new, more efficient structures in the same general location at headquarters. The new buildings would provide adequate work space for electrical, automotive, and plumbing repairs, shelter for equipment and materials, office space, and a receiving area.

- Construct an attached office at the Schoodic ranger residence.

- Construct additional office space at the park headquarters.

Employee Housing

- Continue using all existing park housing except the gate lodges. The Brown Mountain and Jordan Pond gate lodges would continue to provide housing until housing needs were met elsewhere and a shuttle bus was operational to the Jordan Pond area. Then they would be converted to interpretive use.

- Adaptively use the Baker Island lightkeeper's house for park housing. The exterior of the house would be restored, and the interior would be adapted as a modern residence. Caretakers would live in the house to provide onsite interpretation, protection, and maintenance services. Other associated structures would be stabilized.

- Work cooperatively with island communities to provide affordable seasonal housing on private land outside the park. Working cooperatively with other seasonal businesses the National Park Service would seek to provide sufficient comfortable housing for use by seasonal employees. In the interim, until adequate community housing was available, acquired inholdings with suitable residential structures would be used temporarily for park housing. The National Park Service would comply with the same restrictions on the use or expansion of inholdings that apply to private landowners. Temporarily using acquired structures would help the Park Service meet its immediate needs for additional seasonal housing without disturbing currently undeveloped lands.

- Replace existing employee trailer housing at park campgrounds with permanent housing.
- Provide additional RV sites for NPS seasonal employees and volunteers who arrive for work with their own campers. As the trailers that were formerly used for seasonal housing were replaced with new housing, trailer pads would be used as RV sites for seasonal park employees and volunteers.
- Construct additional park housing at Harden Farm.

ALTERNATIVE 2: MANAGED USE

OVERVIEW

Alternative 2 would manage use to provide a variety of low-density to high-density visitor experiences and to protect sensitive resource areas. This alternative recognizes that public tastes for outdoor recreation are diverse and that both high-density and low-density recreational opportunities are valid in national parks. Because opportunities for low-density recreation can be readily displaced by incremental change and unplanned development, this alternative would purposefully protect these opportunities in some parts of the park while also promoting quality high-density recreation in other areas. High-density recreation would be supported in specific areas on the east side of Mount Desert Island, but the present character elsewhere on the island, and on Schoodic Peninsula and the offshore islands, would be retained. To ensure visitor satisfaction, considerable emphasis would be placed on directing visitors to the kinds of recreational activities they seek and on providing more opportunities for visitors to understand the natural and cultural resources of Acadia.

A central premise of this alternative is that crowding is resulting in a decline in the quality of the visitor experience along the Park Loop Road and at popular features throughout the park during much of the peak season. Sensitive natural areas and cultural resources are being adversely affected by unregulated visitor use. In addition, the park's natural systems and scenic resources are being diminished by development both inside and beyond the park's boundaries. Management of visitor access to various areas of the park, coupled with collaborative conservation actions and improved preservation and maintenance, would prevent further decline of natural, cultural, and scenic resources. The issue of carrying capacity would be addressed by managing access to various areas of the park to improve resource protection while providing a variety of high quality visitor experiences. Baseline data would be collected, and visitor use and resource protection objectives would be defined for different areas of the park. This information would provide the basis for establishing and refining strategies for management of visitor use.

Resource management would be focused on retaining and enhancing the unique qualities and resources of the park. Natural resources would be managed to protect and perpetuate natural processes. To avoid any further fragmentation of the park's ecosystems, no new trail connections, roadways, or parking areas would be built or reopened. Aside from a new visitor center, a loop road underpass, and expansion of park headquarters, development in the park would be kept to a minimum, and the concession operations would be reduced.

The needs for research and monitoring, including collection of data with which to evaluate visitor use impacts, would be described and prioritized. Assistance from various state agencies would be enlisted to collect baseline data, manage fishing, hunting, and trapping on the great ponds, and designate protected areas along the intertidal zones to ensure protection of the flora and fauna. Research and monitoring needs that did not receive NPS or state funding would be described to faculty and students of local and national universities to encourage supplemental research projects.

The National Park Service would collaborate with the surrounding communities to ensure the protection of natural, cultural, and scenic resources located outside the park boundary but significant to the perpetuation of natural systems, scenic quality and the cultural heritage of the park and region. The park staff would share its computerized geographic information system and other inventories, labor, tools, and training to help towns develop comprehensive plans and ordinances that recognized and protected these resources. The local college and universities would also be asked to share in this effort.

Full rehabilitation of the carriage road system, including the vistas, would offer high-quality opportunities for bikers, walkers, joggers, skiers, and equestrians. Separation of these uses would reduce conflicts. The scenic drive experience and safety on the historic Park Loop Road would be enhanced by elimination of parking in the right lane, restoration and maintenance of vistas, and diversion of bicycle traffic to the carriage roads. Access to the two most popular segments of the Park Loop Road, Ocean Drive and the Cadillac Mountain Summit Road, would be possible only with a park pass. Capacities of existing parking lots would be enforced and no new visitor parking areas would be constructed. These actions would provide incentives for ridership on privately operated tour buses and new shuttle bus systems.

VISITOR EXPERIENCE

The following actions would enhance the visitor experience and protect park resources while accommodating the existing levels of use.

Manage Use to Provide a Range of Recreational Opportunities and to Protect Sensitive Resources

Manage islandwide tourism to eliminate growth in the peak season but to allow slow growth in the off-season. The program would be similar to that described for alternative 1; however, the goal of managing tourism would be slow growth in the off-season and no growth during the peak season. No new park facilities would be provided to promote winter use. Services and facilities would be structured to enable visitors to select from a range of low-density to high-density recreational and educational opportunities in all seasons.

Designate high- to low-density use zones; relieve crowding in high use areas by dispersing visitors throughout the high-density zone. Some of the park management zones would be subdivided into recreational use zones designating high-density to low-density visitor use. Specific management objectives would be defined for each use zone based on the desired visitor experience and the sensitivity of the resources, and use would be managed to achieve or maintain the stated objectives. High-density zones and park development would be limited to specific areas on the east side of Mount Desert Island. Lower density use would occur elsewhere on the east side of Mount Desert Island, the west side of Mount Desert Island, Schoodic Peninsula, and the offshore islands.

Crowding in high use areas would be alleviated by dispersing visitors throughout the high-density zone, but not into areas zoned for low-density use. For example, crowding at the most popular features along Ocean Drive would be reduced by encouraging visitors to spread out more along the entire road segment. This would facilitate high-density recreation in areas such as the Park Loop Road and Sand Beach while ensuring the perpetuation of low-density recreational opportunities in areas such as the trails on the western side of Mount Desert Island and Schoodic Peninsula.

Improve orientation and information by providing a new entrance gateway and visitor center. A gateway and visitor center would be developed near the primary park entrance to improve visitor orientation and information. The concept would be the same as in alternative 1, but the design solution would be different (see "Development"). A critical design and program requirement would be to inform visitors of the range of recreational and interpretive opportunities available to them.

Rehabilitate the carriage road system. Same as alternative 1.

Improve maintenance of the trail system but avoid new connectors to avoid adverse impacts on currently undisturbed species and habitats; limit trail access to critical habitat areas. Research would be conducted to measure trail use and to monitor impacts on soils and vegetation. Where negative impacts were discovered, or where potential for future degradation seemed likely, actions would be implemented to reduce impacts. Sensitive habitats would be protected by (1) educating visitors to the potential harm to vegetation resulting from off-trail travel, (2) removing false cairns, (3) limiting the number of trails in critical habitats, and (4) limiting parking and bus drop-offs.

Use of offshore islands during breeding and nesting seasons would be prohibited. Other areas with limited access might include, but not be limited to, the summits of Cadillac, Penobscot, Sargent, and Pemetic mountains, Little Moose Island, and the Big Heath. Parking for access to these areas would be limited to the existing lots with no overflow and no parking in the right lane of the loop road, and shuttle bus dropoffs would be regulated. On the Cadillac Mountain summit stairways would be removed and dirt trails would be revegetated. Signs would be installed explaining the revegetation program, interpreting the fragility of the vegetation, and requesting visitors to remain on the concrete pathways.

Retain opportunities for low-density recreation on the west side of Mount Desert Island, Schoodic Peninsula, and the offshore islands. Existing capacities of parking lots would be enforced and offshore islands would be patrolled with the intent of retaining the existing naturalness and solitude of these parts of the park.

Close the Valley Cove Road to motorized vehicles. Hiking and biking would be permitted, but the road would be closed to motor vehicles. This would minimize congestion at Valley Cove and enhance the remote character of the area.

Avoid plowing additional portions of the loop road to avoid adverse impacts on currently undisturbed species and habitats. Preventing the introduction of cars and salt would help protect important habitat areas that have traditionally remained remote for most of the winter months.

Enhance the staging area for winter recreation at Hulls Cove. Same as alterntive 1.

Provide public restrooms at Eagle Lake, Lake Wood, and Thunder Hole.

Implement a comprehensive sign program in cooperation with surrounding communities. Same as alternative 1.

Reduce Crowding and Protect Sensitive Areas by Managing Access and Separating Uses

Encourage public transportation on Mount Desert Island and private shuttle bus systems to serve the park. Public transportation and private shuttle bus systems would be encouraged to operate within and between towns and campgrounds and on all segments of the Park Loop Road except the Stanley Brook Road. Incentives would include designated bus stops within the park and increased demand for such service as a result of less available parking. Private financing would not divert funds from resource protection.

Limit parking along the loop road to what can be accommodated in the existing parking lots. Similar to alternative 1, except the elimination of parking in the right lane would not be contingent upon the implementation of shuttle bus service, and no additional parking would be provided at Wildwood Stables.

Convert the Lower Mountain Road to one-way traffic. This action would ease congestion, reduce safety problems, and facilitate visitor orientation. Visitors could no longer enter the loop road at State Route 233, head south on Lower Mountain Road, and find themselves lost in Seal Harbor. Having two northbound lanes would provide a stacking lane for the control station at the base of Cadillac Mountain. As with other sections of the loop road, no right-lane parking would be allowed.

Protect highway aesthetics by minimizing the width of state road widening projects abutting park land.

Separate potentially conflicting uses on the carriage roads. To minimize crowding and conflicts on the carriage roads, potentially conflicting uses would be separated as well as regulated. Any equestrians who brought horses in trailers would be required to reserve parking and enter at Wildwood. Horses would not be permitted on the carriage roads around Witch Hole Pond and Eagle Lake, to enhance opportunities for cycling, hiking, and jogging. The Wildwood Stable concession operation would be restricted to Day Mountain and access to Jordan Pond House. Hiking and biking would not be allowed on the Day Mountain carriage roads while the concession was in operation. Wheeled dog sleds would not be permitted during July and August. Otherwise, dog sleds would be allowed on all the carriage roads except the Eagle Lake, Witch Hole Pond, and Aunt Betty's Pond loops. These loops would be closed to dogsledding to avoid conflicts with other highly popular winter activities and to avoid potential impacts on wildlife corridors. Snowmobiles would be allowed only on the northeastern shore of Eagle Lake. These designations would be contingent upon recommendations of the treatment plan and addressed in a separate action plan for the carriage roads.

Limit recreation vehicles on the summit of Cadillac Mountain and Stanley Brook Road. Size limits for RVs would be instituted on the Cadillac Mountain Summit Road. No trailers, campers, or buses would be permitted on Stanley Brook Road. The winding nature and sensitive design of these roads would not be compromised in an attempt to accommodate these large vehicles.

Separate tent camping from RV camping. Same as alternative 1.

Limit Concession Services

Maintain the current scope of services and low-key ambience of Wildwood Stables; return responsibility for coordinating horse camping to the park staff. Wildwood Stables would continue to provide carriage rides on Day Mountain and to the Jordan Pond House. To minimize impacts to the road surface, hay wagons would be prohibited, use of smaller, lighter carriages would be encouraged, and the concessioner would be required to equip carriages with narrow, hard wheels. In addition, the concessioner would be required to pick up horse manure on carriage roads and to perform routine maintenance on the road surface.

Saddle horse rentals would also be appropriate and would be provided if economically feasible. Operating the campground would be optional for the concessioner; the National Park Service would operate the campground if the concessioner expressed no interest. Horse camping would remain essentially as is: Horses would be tethered outdoors and campers would use existing facilities for a minimal charge. A fence would be constructed to separate horses in the camping area from the concession operation. Horse camping would be limited to a maximum of 20 horses at one time.

No horse boarding facilities would be provided during July and August. Day-use equestrians who trailered their horses would be required to make reservations and pay a fee to park at Wildwood. Use would be limited to 10 trailers per day during July and August. No horse trailers would be permitted at any other parking areas in the park.

Most employees would be housed offsite. Caretakers required for security would be housed in a tent or small cabin.

Close the Thunder Hole gift shop. Same as alternative 1.

Improve the efficiency of the Jordan Pond House restaurant. Same as alternative 1.

Permit no new concession operations or facilities in the park, with the possible exception of a shuttle bus transportation system.

CULTURAL RESOURCE MANAGEMENT

Protect the Aesthetic and Historic Values of the Park Loop Road

Protect and enhance the original design intent of the historic Park Loop Road. Same as alternative 1 with the added protection that no expansion of parking would be allowed at Wildwood Stables.

Rehabilitate and Maintain the Historic Carriage Road and Trail Systems

Rehabilitate the carriage roads and reestablish the vistas. Same as alternative 1.

Improve trail maintenance. Same as alternative 1.

Preserve and Perpetuate Original Uses of Historic Structures

Evaluate, treat, and maintain historic structures. Same as alternative 1.

Continue using the Jordan Pond and Brown Mountain gate lodges for park employee housing. The historic exterior facades and grounds of these national register structures, whose original intent was simply to appear romantic, would be preserved by retaining their historic residential uses. A cultural landscape report would be prepared, and a caretaker would be provided to ensure that the grounds were properly cared for.

Open the historic Carroll homestead and grounds for groups on a reservation basis. The house and grounds would be open to groups accompanied by a park interpreter on a reservation basis. The road to the Carroll homestead would remain closed to the general public to minimize the potential for vandalism.

Continue preservation of the Bear Island light station through the historic leasing program. Same as alternative 1.

Convert the gift shop building at Thunder Hole to a ranger station. The structure at Thunder Hole would be returned to its original use as a ranger station with an exhibit on the fragility of the intertidal zone.

Maintain Artifact Collections to NPS Standards

Catalog and treat the park collections. Same as alternative 1.

Protect Archeological Resources

Survey, monitor, and stabilize archeological resources. Same as alternative 1.

NATURAL RESOURCE MANAGEMENT

Improve Air and Water Quality

Monitor air quality and work to eliminate and prevent problems. Same as alternative 1.

Participate in regional air quality regulatory programs. Same as alternative 1.

Develop and implement a comprehensive water resource management plan. Same as alternative 1.

Expand water quality monitoring. Same as alternative 1.

Avoid occupancy and modification of floodplains. Same as alternative 1.

Cooperatively Protect Species and Habitats of Value to the Park

Take a lead role in coordinating a collaborative effort of research, monitoring, and planning needed to understand and manage resources of value to the park. Same as alternative 1.

Protect and enhance habitat for species of special concern. Same as alternative 1.

Implement the park's integrated pest management plan. Same as alternative 1.

Establish and work to implement mutual goals with state agencies where state jurisdiction directly effects park resources. Same as alternative 1.

Communicate research data to the public. Same as alternative 1.

Manage fire to protect life and property and to perpetuate fire-dependent ecosystems. Same as alternative 1.

Work with Adjacent Landowners and Communities to Enhance Park Values

Survey and mark the park boundary. Same as alternative 1.

Develop cooperative relationships with local building code enforcement officers. Same as alternative 1.

Offer technical planning assistance to local towns. Same as alternative 1.

Cooperate with local land trusts to institute a proactive conservation easement program and establish a base-funded conservation easement monitoring program. Same as alternative 1.

STAFFING REQUIREMENTS

Additional positions required under this alternative are shown in appendix F.

DEVELOPMENT

General

Reflect Acadia's architectural tradition in all new visitor facilities. Same as alternative 1.

Provide additional facilities for visitors with disabilities. Same as alternative 1.

Limit new development to help retain the historic character and naturalness of the park.

Interpretive Facilities

- Provide a new park gateway and visitor center. A major entrance sign and traffic islands would clearly designate the currently unmarked north entrance to the visitor center as the main entrance to the park.

  The new visitor center would be constructed adjacent to the existing parking lot. The building would be equipped with two theaters to serve a maximum number of visitors in a minimal amount of time during July and August. This would also provide for flexibility in programming during the slower periods. The visitor center would be staffed year-round, but only a small portion of the building (the restrooms and perhaps one theater) would be utilized in winter. The building could be made available during evenings for educational or other compatible purposes.

- Relocate the Abbe Museum functions to the current park visitor center building. The Abbe Museum would meet their goals of expanding public outreach programs and providing adequate work and storage space in this larger building in a prominent location. The park staff could use the vacated museum building, which is near a rich variety of natural and cultural resources, as a staging area for the environmental education program.

- Replace the nature center exhibits. Same as alternative 1.

- Replace the Islesford Historical Museum exhibits. Same as alternative 1.

- Upgrade and replace wayside exhibits. Same as alternative 1.

Carriage Road and Trail Systems

- Rehabilitate the historic carriage road and trail systems. Same as alternative 1.

- Construct a carriage road underpass on the Park Loop Road at Bubble Pond. Horses would continue to be excluded from all of the Eagle Lake and Witch Hole Pond carriage roads, the roads most heavily used by bikers, pedestrians, and joggers. The crossing at Bubble Pond would not be designed to accommodate horseback riders or carriages. Thus, an underpass rather than a bridge would be sufficient to separate users and alleviate the safety hazard.

- Reroute the trail connecting the visitor center to the carriage road at Paradise Hill. Same as alternative 1.

Campgrounds and Picnic Areas

- Rehabilitate campsites and clearly designate placement of camping equipment at each site. Same as alternative 1.
- Redesign a portion of the campground to better accommodate RV users and separate tenters from RVs. Same as alternative 1.
- Rehabilitate the Pretty Marsh picnic area. Same as alternative 1.

Concessions

- Provide minimal new facilities at Wildwood Stables. New restrooms would be constructed to serve visitors and employees. Tethering posts would be improved, and the approach to the carriage road would be extended to reduce the steep grade. No more pavement would be added; cars would continue to park on the grass adjacent to the roadway. The concessioner would determine whether the caretaker would be housed in a tent or small cabin.

Miscellaneous Visitor Facilities

- Winterize restrooms at important staging areas for wintertime park users. Same as alternative 1.
- Construct permanent restrooms at Eagle Lake boat launch, Eagle Lake parking area, and Lake Wood.

Administrative Facilities

- Place fee stations at the park gateway and at control points for Cadillac Mountain and Sand Beach. A fee station would be located just inside the new park gateway so that all visitors, including those who would not stop at the visitor center, could be given maps and printed information as soon as they entered the park. The northern entrance to the visitor center parking area would become the main visitor center access route. The road adjacent to the visitor center parking area would be converted to one-way and expanded to three or four southbound lanes to accommodate fee stations. Autos would use the southern access road only to exit, but buses would continue to use that route to enter and exit.

  To discourage visitors from bypassing the main gateway and visitor center just to avoid paying the entrance fee, additional fee stations would be located at the base of Cadillac Mountain and at the current fee-collection location north of Sand Beach. The staff person at the base of Cadillac Mountain would enforce size limits on recreation vehicles and turn vehicles away when the parking capacity on the mountain summit was reached. The existing Sand Beach station would be reduced in size. New, more appropriate structures and low wattage spotlights would be provided.

- Convert the gift shop building at Thunder Hole to a ranger station. The facility would include exhibit space.

- Add artifact storage space onto an existing building at the park headquarters. Rather than being together in a single new structure, as in alternative 1, the storage and curatorial workspace would be separated into two different wings to be added onto the administration building.

- Construct a new wing on the park administration building for increased staff.

- Rehabilitate the maintenance facilities at park headquarters. Existing buildings would be rehabilitated rather than replaced, as they would be in alternative 1.

- Construct an attached office at the Schoodic ranger residence. Same as alternative 1.

Employee Housing

- Continue using all existing park housing. Both gate lodges and all other housing units would continue to be used for housing.

- Utilize acquired developed inholdings for park housing. Similar to alternative 1; however, this would be seen as a longer term solution to housing needs, rather than as an interim measure pending provision of adequate housing in adjacent communities.

- Replace existing employee trailer housing at park campgrounds with permanent housing. Same as alternative 1.

- Provide additional RV sites for NPS seasonal employees and volunteers who arrive for work with their own campers. Same as alternative 1.

ALTERNATIVE 3: MINIMUM ACTION

OVERVIEW

Alternative 3 would meet the minimal requirements for visitor services, resource protection, and maintenance of park facilities through systematic, low-cost solutions. Many issues of concern would not be addressed, and because of financial constraints, park management actions would generally provide only short-term or partial solutions. Increases in funding would be directed towards addressing the most urgent operational deficiencies and keeping pace with rising visitation and the lengthening visitor season.

The one-way traffic pattern and right-lane parking on the Park Loop Road would be extended to include all of Lower Mountain Road. This would accommodate increasing demands for parking while simplifying orientation and reducing the number of visitors driving to the summit of Cadillac Mountain. A new park gateway and major addition to the visitor center would improve visitor orientation and interpretation. Carriage road treatment would be limited to removing vegetation, improving drainage, and resurfacing. Rehabilitation would not be attempted. The National Park Service would share facilities, equipment, and expertise with universities, museums, state and federal agencies, and local communities to reduce costs of scientific, resource management, and curatorial programs. Expanded volunteer, intern, and work study assistance would also be sought to help meet minimum requirements at minimal cost.

VISITOR EXPERIENCE

The following actions would meet the minimum requirements for visitor services and facilities while accommodating increasing levels of use.

Disperse Use to More Areas on the East Side of Mount Desert Island

Accommodate increased use by converting Lower Mountain Road to one-way traffic from Jordan Pond House to Paradise Hill and expanding right-lane parking. This action would facilitate visitor orientation and help disperse use away from Cadillac Mountain and other congested areas.

Improve orientation and information by expanding the existing visitor center. Similar to alternative 1, except the existing visitor center would be expanded to provide adequate seasonal orientation and information services.

Resurface and maintain the carriage roads. Duck Brook Road would be designated for bicycle access only to make more of the carriage road system easily accessible to bicyclists.

Seek publication of more complete interpretive literature on the hiking trail system. The National Park Service would approach groups such as the Appalachian Mountain Club to publish more detailed trail guides, including descriptions of level of difficulty. This would help orient and disperse hiking use.

Implement a comprehensive sign program in cooperation with surrounding communities. Same as alternative 1.

Reduce Impacts of Parked Automobiles in Specific Areas

Prohibit overflow parking at Echo Lake, Eagle Lake, the summit of Cadillac Mountain, and Sieur de Monts. Overflow parking at Echo and Eagle lakes blocks the bike routes along the highways and would be discontinued. Overflow parking on Cadillac Mountain and at Sieur de Monts is destroying sensitive roadside vegetation and would be prohibited.

Protect highway aesthetics by minimizing the width of state road widening projects abutting park land.

Limit Concession Services

Maintain existing scope of services at Wildwood Stables, and retain the pastoral ambience of the development. Similar to alternative 2. Saddle horse rentals would be eliminated. Concession staff housing would be provided by the concessioner off site and in temporary structures or tents. Riding clubs would be asked to improve the existing hitching rails. Horse and carriage use would be regulated to minimize user conflicts and impacts on cultural resources the same as described for alternative 2.

Close the Thunder Hole gift shop. Same as alternative 1.

Improve the efficiency of the Jordan Pond House restaurant. Same as alternative 1.

CULTURAL RESOURCE MANAGEMENT

Protect the Aesthetic Values of the Park Loop Road from Additional Future Changes

Begin to manage the Park Loop Road as a cultural landscape. The loop road would be designated a cultural landscape and nominated to the National Register of Historic Places. Vistas would be maintained, and any repair work would be required to adhere to the original design intent of the road. However, in this alternative, the existing inappropriate construction would remain and parking would continue to be permitted in the right lane.

Maintain the Historic Carriage Road and Trail Systems

Resurface the carriage roads and reestablish 26 vistas. Carriage road work would be focused on clearing vegetation from the roadway and ditches, reestablishing the drainage system, resurfacing, and preventive maintenance of the bridges. The roads would not be restored to historic conditions. The assistance of volunteer crews would be sought.

Restoration of vistas would be key to encouraging use of the carriage road system. Assistance of summer forestry students would be sought to accomplish this work.

Use volunteers to maintain the trails. A prioritized list of trail maintenance work would be developed, and segments would be implemented each year as volunteer and Youth Conservation Corps assistance permitted. Poorly maintained trails would be closed if they became hazardous or caused resource damage such as severe erosion or degradation of sensitive vegetative communities.

Preserve and Perpetuate Original Uses of Historic Structures

Evaluate, treat, and maintain historic structures. Similar to alternative 1. However, since no action would be taken to restore the historic carriage road system, no special priority would be placed on the evaluation and treatment of the carriage road bridges.

Continue using the Jordan Pond and Brown Mountain gate lodges exclusively for park employee housing. Same as alternative 2.

Open the Carroll homestead grounds only for self-guided walking tours.

Continue preservation of the Bear Island light station through the historic leasing program. Same as alternative 1.

Maintain Artifact Collections to NPS Standards

Catalog and treat the park collections. Similar to alternative 1; however collections that are not currently at the park would not be retrieved and cataloged.

Share curatorial duties and expertise with the Abbe Museum. Development of a shared facility and staff would be a cost savings for both the park and the museum.

Protect Archeological Resources

Survey, monitor, and stabilize archeological resources. Same as alternative 1.

NATURAL RESOURCE MANAGEMENT

Work to Protect Air and Water Quality

Monitor air quality and advise park visitors when state or federal health standards are exceeded.

Participate in regional air quality regulatory programs. Same as alternative 1.

Rely on federal, state, and local initiatives for park water quality management. Research projects would occasionally be undertaken, but no long-term baseline data collection program would be undertaken.

Avoid occupancy and modification of floodplains. Same as alternative 1.

Cooperatively Protect Species and Habitats of Value to the Park

Rely in large part on research and monitoring by faculty and students of local and national colleges and universities. The park staff would not take a lead role in coordinating research; rather, the park would be a recipient of research planned and undertaken by others.

Protect habitat for species of special concern. Similar to alternative 1; however, no effort would be made to enhance habitat to increase populations of species of special concern.

Control only those nonnative plants posing a direct threat to native ecosystems.

Establish and work to implement mutual goals with state agencies where state jurisdiction directly affects park resources. Same as alternative 1.

Suppress fires to protect life and property.

Cooperate with Private Landowners and Communities to Protect Resources of Value to the Park

Sporadically monitor park inholdings for compliance with development restrictions.

Sporadically monitor the existing conservation easements.

STAFFING REQUIREMENTS

Additional positions required under this alternative are shown in appendix F.

DEVELOPMENT

General

Provide minimal additional facilities for handicapped visitors. All new facilities would be accessible to visitors with disabilities. A captioned orientation film would be presented at the visitor center.

Minimize new development.

Interpretive Facilities

- Expand the existing seasonal visitor center. A new enlarged lobby, auditorium, and bookstore would be added onto the existing visitor center, and the current auditorium and lobby would be converted to exhibit space. The heating and ventilation system would be improved, and a cooling system would be added, creating a safer, more comfortable working environment. Adequate restrooms would be moved to a new location with outdoor access. A ramp would be installed between the parking lot and the visitor center to make the building accessible to visitors with disabilities. The expanded visitor center would be open only during the main visitor season. The winter visitor center would remain at the park headquarters.

- Gradually improve the nature center and Islesford Historical Museum exhibits.

- Expand the Abbe Museum by 25% at its current location. If office space was removed from the existing building and located outside the park, the majority of the existing structure could be utilized for visitor services and exhibits. The museum would share in the construction and use of climate-controlled curatorial work space and artifact storage at park headquarters. Auditorium space could be leased on an as-needed basis at other facilities on the island.

- Enforce deed restrictions on the Abbe Museum access road. Same as alternative 1.

- Upgrade and replace wayside exhibits. Same as alternative 1.

Campgrounds and Picnic Areas

- Rehabilitate campsites. Similar to alternative 1; however, no action would be taken to make the campgrounds more suitable for recreation vehicles.

- Rehabilitate the Pretty Marsh picnic area. Same as alternative 1.

Miscellaneous Visitor Facilities

- Maintain portable toilets at the Eagle Lake parking area and the visitor center in the off-season.

- Install minimal cost toilets at Thunder Hole, the Eagle Lake parking area, the Eagle Lake boat launch, Acadia Mountain, and Lake Wood for the summer season.

Administrative Facilities

- Retain the existing fee collection facility at Sand Beach.

- Seek to share collections storage and curatorial work space with the Abbe museum. One new structure at park headquarters would serve both NPS and Abbe Museum needs.

- Gradually upgrade maintenance facilities. Maintenance facilities would be upgraded in a piecemeal fashion to provide the minimal amount of needed work space and energy efficiency. The prefabricated metal gymnasium and the concrete block building would be retained. A new roof would be added to the concrete block building, and additional outbuildings and wings would be added.

- Construct an attached office at the Schoodic ranger residence. Same as alternative 1.

Employee Housing

- Continue using all existing park housing. Same as alternative 2.

- Utilize acquired developed inholdings for park housing. Same as alternative 1.

ALTERNATIVE 4: STATUS QUO

OVERVIEW

The following alternative describes what would happen if park management continued without the benefit of an approved and implemented general management plan. Without articulated objectives or adequate funding, staffing, or facilities, park managers would only be able to respond to the most severe inadequacies as they occurred.

VISITOR EXPERIENCE

Accommodate Increasing Use with No New Major Development

Retain the existing visitor center. The visitor center would remain difficult to access and would be undersized.

Expand right-lane parking along one-way sections of the Park Loop Road; add parking in areas of most critical need. No attempts would be made to control access or to provide transportation alternatives to automobiles. Right-lane parking would continue to be permitted on one-way sections of the Park Loop Road. Parked cars would continue to overflow onto road shoulders and bike lanes during peak season.

Manage parking congestion on a case-by-case basis. Attempts to alleviate traffic congestion would be made on a case-by-case basis, resulting in incremental road and parking area expansion. Rangers would respond to traffic problems as the need arose and staff was available. Sand Beach and Echo Lake Beach parking areas would be closed when capacity was reached.

Encourage development of bike lanes along state highways. Same as alternative 1.

Retain Existing Level of Concession Services

Maintain existing gift shops and sales items. The three existing gift shops would continue to offer a wide array of items readily available in nearby community gift shops.

Maintain existing scope of services and existing development at Wildwood Stables.

CULTURAL RESOURCE MANAGEMENT

Emphasize Traffic Management Over the Cultural or Aesthetic Values of the Park Loop Road

Accommodate as much parking as possible along the Park Loop Road.

Maintain some scenic vistas. Vistas along the loop road would be maintained sporadically, as funds permitted, and without the guidance of a vista management plan.

Partially Maintain Historic Carriage Road and Trail Systems

Add surface material to carriage roads as funds allow. Occasionally, funds would be available to permit minor maintenance and piecemeal resurfacing, but no attention would be directed to rehabilitation of the roads and bridges. Vistas along the carriage roads would not be reestablished or maintained.

Use volunteers to maintain trails. Trails would be maintained to the extent possible using volunteers. Poorly maintained hiking trails would be closed if they became hazardous.

Document, and Maintain Some Historic Structures

Document historic structures. Historic structures would be documented. Structures that were being used would be maintained, but other structures would be allowed to deteriorate naturally.

Offer off-season guided tours of the Carroll homestead. The Carroll homestead would be open during the off-season by advance reservation to groups accompanied by a park interpreter.

Continue using the Jordan Pond and Brown Mountain gate lodges for park employee housing. Same as alternative 2.

Continue preservation of the Bear Island light station through the historic leasing program. Same as alternative 1.

Partially Maintain Artifact Collections

Sporadically catalog and treat park collections. The park staff would continue to apply for private and federal grants and to depend on donations and short-term funding to support sporadic efforts to catalog and treat park collections. Collections in the park would continue to be stored in existing facilities, which do not meet NPS standards for preservation and security. Collections stored at universities and colleges would not be inventoried or accessioned.

Partially Protect Archeological Resources

Treat archeological resources on a case-by-case basis. No program would exist for the comprehensive survey, monitoring, and stabilization of archeological resources. If known resources were found to be threatened by rising sea levels, vandalism, or other causes, the decision would be made on a case-by-case basis whether or not to stabilize or document the resource.

NATURAL RESOURCE MANAGEMENT

Maintain Existing Air and Water Quality Program

Monitor air quality and advise park visitors when state or federal health standards are exceeded.

Rely on federal, state, and local initiatives for park water quality management. Same as alternative 3.

Avoid occupancy and modification of floodplains. Same as alternative 1.

Cooperatively Protect Species and Habitats of Value to the Park

Continue to attempt to protect native species without adequate basic inventories of flora and fauna.

Protect habitat of species of special concern. Same as alternative 3.

Control only those nonnative plants posing a direct threat to native ecosystems. Same as alternative 3.

Suppress fires to protect life and property. Same as alternative 3.

Cooperate with Other Landowners and Communities to Protect Resources of Value to the Park

Sporadically monitor the existing conservation agreements. Same as alternative 3.

STAFFING REQUIREMENTS

Staffing for this alternative is shown in appendix F.

DEVELOPMENT

All existing facilities, including the Abbe Museum buildings, would be retained without major improvements. No new major facilities would be constructed, but some additional parking might be provided to ease increasing traffic congestion.

Table 2: Summary of Alternative Actions
(For impacts, see Table 5)

	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Requirements	Alternative 4: Status Quo
VISITOR EXPERIENCE	**Disperse use throughout more of the park and throughout the year.**	**Manage use to provide a range of recreational opportunities and to protect sensitive resources.**	**Disperse use to more areas on the east side of Mount Desert Island.**	**Accommodate increasing use with no new major development.**
	Manage islandwide tourism to accommodate a modest increase in visitation during the peak season and promote growth in the off-season.	Manage islandwide tourism to eliminate growth in the peak season but allow slow growth in the off-season.		
		Designate high- to low-density use zones; relieve crowding in high use areas by dispersing visitors throughout the high-density zone.	Accomodate increased use by converting Lower Mountain Road to one-way traffic from Jordan Pond House to Paradise Hill and expanding right-lane parking.	Expand right-lane parking along one-way sections of the Park Loop Road and add parking in areas of most critical need.
	Improve access, orientation, and information by providing a new entrance gateway and visitor center at Hulls Cove.	Similar to alternative 1 but with an entrance station at Hulls Cove.	Improve orientation and information by expanding the existing visitor center.	Retain the existing visitor center.
	Rehabilitate the carriage road system.	Same as alternative 1.	Resurface and maintain the carriage roads.	Add surface material to carriage roads as funds allow.

Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Requirements	Alternative 4: Status Quo
Expand and upgrade the trail system and direct hikers to less heavily used trails; mitigate impacts in sensitive or overused areas.	Improve maintenance of the trail system but avoid new connectors to avoid adverse impacts on currently undisturbed species and habitats; limit trail access to critical habitat areas.	Seek publication of more complete interpretive literature on the hiking trail system.	
Retain opportunities for low density recreation on Schoodic Peninsula and the offshore islands.	Retain opportunities for low density recreation on the west side of Mount Desert Island, Schoodic Peninsula, and the offshore islands.	Same as alternative 1.	
Reestablish the Western Mountain picnic areas to serve increased use on the west side of Mount Desert Island.	Close the Valley Cove road to motorized vehicles.		
Make Siuer de Monts a year-round entrance to the park loop road and plow to Ocean Drive.	Avoid plowing additional portions of the loop road to avoid adverse impacts on currently undisturbed species or habitats.		
Enhance the existing staging area for winter recreation at Hulls Cove.	Same as alternative 1.		
Open a park concession facility during the skiing season.			

Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Requirements	Alternative 4: Status Quo
Provide public restrooms at Thunder Hole, Eagle Lake, Acadia Mountain, and Lake Wood.	Provide public restrooms at Eagle Lake, Lake Wood, and Thunder Hole.	Same as alternative 1.	
Implement a comprehensive sign program in cooperation with surrounding communities.	Same as alternative 1.	Same as alternative 1.	
Reduce perceptions of crowding by reducing the number of parked automobiles and by regulating use.	Reduce crowding and protect sensitive areas by managing access and separating uses.	**Reduce impacts of parked automobiles in specific areas.**	
Encourage public transportation on Mount Desert Island and establish a park shuttle bus.	Encourage public transportation on Mount Desert Island and private shuttle bus systems to serve the park.		
Limit parking to what can be accommodated in the existing parking lots (except at Eagle Lake and Wildwood Stables). (Eliminate right-lane parking.)	Reduce parking along the loop road to what can be accommodated in the existing parking lots. (Eliminate right lane parking.)	Prohibit overflow parking at Echo Lake, Eagle Lake, the summit of Cadillac Mountain, and Sieur de Monts.	Manage parking congestion on a case-by-case basis.
	Convert the Lower Mountain Road to one-way traffic		
Encourage the development of bike lanes along state highways.	Protect highway aesthetics by minimizing the width of state road widening projects abutting park land.	Same as alternative 2.	Same as alternative 1.

	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Requirements	Alternative 4: Status Quo
	Establish rules for users of the carriage roads.	Separate potentially conflicting uses on the carriage roads.		
	Limit the size of recreation vehicles on the summit of Cadillac Mountain and prohibit RVs on the Park Loop Road while the shuttle bus is operational.	Limit recreation vehicles on the summit of Cadillac Mountain and Stanley Brook Road.		
	Separate tent camping from RV camping.	Same as alternative 1.		
Concessions Services	Expand horse and carriage concession services and improve Wildwood Stables.	Maintain the current scope of services and low-key ambience of Wildwood Stables; return responsibility for coordinating horse camping to the park staff.	Similar to alternative 2 but horseback riding would be eliminated.	
	Open a park concession during the ski season.	Permit no new concession operations or facilities in the park, with the possible exception of a shuttle bus system.		
	Improve the efficiency of the Jordan Pond House restaurant.	Same as alternative 1.	Same as alternative 1.	
	Close gift shop at Thunder Hole.	Same as alternative 1.	Same as alternative 1.	

	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Requirements	Alternative 4: Status Quo
CULTURAL RESOURCE MANAGEMENT				
Park Loop Road	Protect and enhance the original design intent of the historic Park Loop Road.	Same as alternative 1.	Begin to manage the Park Loop Road as a cultural landscape. (However, the use of the right lane for parking would be expanded.)	Accommodate as much parking as possible along the Park Loop Road.
				Maintain some scenic vistas.
Carriage roads	Rehabilitate the carriage roads and reestablish the vistas.	Same as alternative 1.	Resurface the carriage road system and reestablish 26 vistas.	Add surface material to carriage roads as funds allow.
Trails	Improve trail maintenance	Same as alternative 1.	Use volunteers to maintain the trails.	Same as alternative 3.
Historic structures	Evaluate, treat, and maintain historic structures.	Same as alternative 1.	Same as alternative 1.	Document historic structures.
	Adaptively use three historic structures for interpretive programs.	Continue using the Jordan Pond and Brown Mountain gate lodges for park employee housing.	Same as alternative 2.	Same as alternative 2.
		Convert the gift shop building at Thunder Hole to a ranger station.		
	Open the historic Carroll homestead grounds to the public on a reservation basis.	Open the Carroll homestead and grounds for group tours on a reservation basis.	Open the Carroll homestead grounds only for self-guided walking tours.	Offer off-season guided tours of the Carroll homestead.

	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Requirements	Alternative 4: Status Quo
	Continue preservation of the Bear Island light station through the historic leasing program.	Same as alternative 1.	Same as alternative 1.	Same as alternative 1.
Collections	Catalog and treat the park collections.	Same as alternative 1.	Same as alternative 1.	Sporidically catalog and treat park collections.
Archeological sites	Survey, monitor, and stabilize archeological resources.	Same as alternative 1.	Same as alternative 1.	Treat archeological resources on a case-by-case basis.
NATURAL RESOURCE MANAGEMENT				
Air and water quality	Monitor air quality and work to eliminate and prevent problems.	Same as alternative 1.	Monitor air quality and advise park visitors when state or federal health standards are exceeded.	Same as alternative 3.
	Participate in regional air quality regulatory programs.	Same as alternative 1.	Same as alternative 1.	
	Develop and implement a comprehensive water resource management plan.	Same as alternative 1.	Rely on federal, state, and local initiatives for park water quality management.	Same as alternative 3.
	Expand water quality monitoring.	Same as alternative 1.	Maintain existing water quality program.	Same as alternative 3.
	Avoid occupancy and modification of floodplains.	Same as alternative 1.	Same as alternative 1.	Same as alternative 1.

	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Requirements	Alternative 4: Status Quo
Species and habitats	Take a lead role in coordinating a collaborative effort of research, monitoring, and planning.	Same as alternative 1.	Rely in large part on research and monitoring by faculty and students of local and national colleges and universities.	Continue to attempt to protect native species without adequate basic inventories of flora and fauna.
	Protect and enhance habitat for species of special concern.	Same as alternative 1.	Protect habitat for species of special concern.	Same as alternative 3.
	Implement the park's integrated pest management plan.	Same as alternative 1.	Control only those nonnative plants posing a direct threat to native ecosystems.	Same as alternative 3.
	Establish and work to implement mutual goals with state agencies where state jurisdiction directly affects park resources.	Same as alternative 1.	Same as alternative 1.	
	Communicate research data to the public.	Same as alternative 1.	Same as alternative 1.	
	Manage fire to protect life and property and to perpetuate fire-dependent ecosystems.	Same as alternative 1.	Suppress fires to protect life and property.	Same as alternative 3.
ADJACENT LAND USE	Survey and mark the park boundary.	Same as alternative 1.		
	Develop cooperative relationships with local building code enforcement officers.	Same as alternative 1.	Sporadically monitor park inholdings for compliance with development restrictions.	
	Offer technical planning assistance to local towns.	Same as alternative 1.		

	Alternative 1: Dispersed Use	**Alternative 2: Managed Use**	**Alternative 3: Minimum Requirements**	**Alternative 4: Status Quo**
	Cooperate with local land trusts to institute a proactive conservation easement program and establish a base-funded easement monitoring program.	Same as alternative 1.	Sporadically monitor the existing conservation easements.	Same as alternative 3.
DEVELOPMENT				
General	Reflect Acadia's architectural tradition in all new visitor facilities.	Same as alternative 1.		
	Provide park development only in specific areas on Mount Desert Island.	Limit new development to help retain the historic character and naturalness of the park.	Minimize new development.	
	Provide additional facilities for visitors with disabilities.	Same as alternative 1.	Provide minimal new facilities for visitors with disabilities.	

Table 3: Summary Comparison of Development and Development Costs, Alternatives 1-3

	Alternative 1	Alternative 2	Alternative 3
Interpretive Facilities			
New visitor center exhibits	$500,000	$500,000	$500,000
New visitor center furnishings	800,000	800,000	800,000
New visitor center media and equipment	1,330,000	1,285,000	1,285,000
New exhibits at old visitor center	426,400		426,400
New nature center exhibits	167,700	167,700	82,000
Islesford Historical Museum exhibits	186,700	186,700	93,000
Carroll homestead interpretive panels and wayside exhibits	200,800	200,800	
Thunder Hole interpretive exhibits	67,600	67,600	
Upgrade and replace wayside exhibits parkwide	144,000	144,000	
Brown Mountain carriage road interpretive facility	170,600		
Jordan Pond gate lodge interpretive facility	170,600		
Landscape Treatments			
Trails and Carriage roads			
carriage road restoration	4,200,000	4,200,000	
carriage road resurfacing and vista clearing			1,400,000
carriage road bridge construction at Bubble Pond	655,000		
carriage road underpass construction at Bubble Pond		295,000	
Sieur de Monts/Bar Harbor/Eagle Lake bike trail link (4.6 mi.)	600,000		
Champlain Mtn. trail section (0.8 mi)	9,100		
bike path from MDI High School to Breakneck Road (1.5 mi)	196,000		
bike path along Schooner Head Road	393,000		

trail system upgrade	210,000	210,000	210,000
Campgrounds and picnic areas			
Blackwoods campground	560,000	560,000	
Seawall campground	134,000	134,000	
Pretty Marsh picnic area	12,500	12,500	
Oak Hill and Pine Hill picnic areas (reestablish)	35,000		
Historic Structure Treatment			
Brown Mtn. gate lodge interior rehabilitation	62,000		
Gilley house interior rehabilitation	42,000		
Baker Island lightkeeper's house interior rehabilitation	63,000		
General Development			
New visitor center:			
Building connected to existing visitor center, rehabilitation of old visitor center and office space, elevator, and site work and utilities	7,126,000		
New building, entrance road from Route 3, utilities and site work (no change to existing visitor center)		6,612,000	
Existing visitor center rehabilitation, elevator, utilities, and site work			6,676,400
New gateway signing	39,300	39,300	39,300
Maintenance building replacement	1,500,000		
Maintenance building rehabilitation		360,000	
Curatorial storage building at Headquarters	250,000	250,000	250,000
Curatorial storage addition at Islesford	131,000	131,000	131,000
Replacement fee station at Sand Beach, including road work	630,000	35,500	
Control station at Cadillac Mountain		35,500	
Fee collection station at visitor center		630,000	

New seasonal housing at Blackwoods (2 units) and Seawall (2 units)	335,000	335,000	335,000
New seasonal housing units (8)	670,000	670,000	
Schoodic ranger office addition to house	98,000	98,000	
Building at Thunder Hole adapted for ranger contact/emergency station			27,500
Nature center winterization	3,300	3,300	
Jordon Pond dorm winterzation	6,000		
Roads and parking			
road aesthetics work	58,300	58,300	
Eagle Lake parking (20 autos)	42,000		
Restrooms			
New restrooms at Acadia Mountain (alternative 1 only), Eagle Lake parking, Lake Wood, and Thunder Hole	229,000	137,500	150,000
winterization at Sieur de Monts, visitor center, and Cadillac summit	26,200	26,200	26,200
Concession Facilities			
Wildwood Stables			
new barn and dorm	420,000		
upgraded camping and picnic facilities	44,000		
parking *55 spaces) and culverts	112,000		
restroom and registration building	183,000		
roads and walkways	78,000		
caretaker cabin		55,000	
site improvements: landscaping and surface treatment (alternative 1 only), fencing, and carriage road access grading	149,000	48,000	48,000
Brown Mountain ticket area in gate tower	4,600		
Subtotal, Gross Construction Costs	$23,470,700	$18,287,900	$12,479,800

Planning			
Advanced and Project Planning Costs	$ 4,479,100	$ 3,490,100	$ 2,381,600
Carriage Road Treatment Plan	35,000	35,000	
Comprehensive Sign Plan	20,000	20,000	20,000
Subtotal, Planning Costs	**$ 4,534,100**	**$ 3,545,100**	**$ 2,401,600**
Capital Costs: Shuttle Bus System			
Phase I – Cadillac Mt (3 buses)	$ 225,000		
Phase II – Park Loop Rd (18 buses)	1,350,000		
Subtotal, Capital Costs	**$ 1,575,000**		
Total Development Costs	**$29,579,800**	**$21,833,000**	**$14,881,400**

Table 4: Additional Annual Operations, Alternative 1-3

	Alternative 1	Alternative 2	Alternative 3
Maintenance			
Staffing	$1,024,053	$644,055	$436,085
Equip/Travel	38,600	32,600	25,400
	1,062,653	676,655	461,485
Planning & Lands Management:			
Staffing	40,000	40,000	0
Equip/Travel	12,000	12,000	0
	52,000	52,000	0
Visitor Protection:			
Staffing	207,984	196,984	108,442
Equip/Travel	32,132	29,548	16,263
	239,116	226,532	124,685
Interpretation			
Staffing	162,180	162,180	116,420
Equip/Travel	10,352	10,352	4,850
	172,532	172,532	121,270
Cultural Resource Management:			
Staffing	147,200	74,260	29,955
Equip/Travel	12,770	7,620	4,320
	159,970	81,880	34,275
Natural Resource Management			
Staffing	111,334	159,720	0
Equip/Travel	11,666	14,850	0
	123,000	174,570	0
Administration:			
Staffing	0	127,019	64,170
Equip/Travel	0	13,875	9,000
	0	140,894	73,170
Shuttle Bus (Phase II):	405,000	—	—
TOTALS	$2,214,271	$1,525,063	$814,885

PART THREE: ENVIRONMENTAL DESCRIPTION AND ANALYSIS

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DESCRIPTION OF THE ENVIRONMENT

REGIONAL CONTEXT

Acadia is located on the coast of Maine, where the highest mountains on the eastern seaboard touch the rocky coast of the Atlantic Ocean. The scenic beauty is enhanced by the rugged and dramatic bare mountain peaks, woodlands, lakes, and diverse marshlands. Small coastal villages and elegant resort cottages contribute to the character of the islands.

The area within the permanent park boundary, as established in 1986, is approximately 42,250 acres. Most of the park is on Mount Desert Island, but additional park lands extend onto Schoodic Peninsula, Isle Au Haut, and the surrounding islands in Hancock County and in Knox County east and south of the Penobscot Ship Channel. The park lies in the towns of Bar Harbor, Mount Desert, Southwest Harbor, Tremont, Gouldsboro, Winter Harbor, Trenton, Isle Au Haut, Cranberry Isles, Swans Island, and Frenchboro.

Park holdings on Mount Desert Island presently include approximately 35,000 acres. Somes Sound, the only fiord in the lower 48 United States, divides the island into the east side and the west side. The most spectacular and well known features are found on the east side. The west side has a quieter and more natural character and includes the coastal settlements and extensive marshlands.

Park Location and Access

Located approximately 45 miles southeast of Bangor Maine, the park is within a day's drive of major metropolitan centers on the east coast. Mount Desert Island and Schoodic Peninsula are accessible from US Route 1, which follows the coast, as well as from other state highways. It is approximately 5 hours by car from Boston.

A ferry service to and from Nova Scotia operates daily from Bar Harbor during the peak season and three times a week during the off-season. Other ferries operated by the state of Maine and private operators provide access to several of the islands where the park has land holdings, including the Cranberry Isles, Swans Island, and Baker Island. Some of the ferries accommodate vehicles as well as pedestrians. The vast majority of visitors arrive and tour the island's scenic roads by automobile.

Economics and Social Context

The economies of the island communities surrounding the park are based on professional services, fishing, boat building, construction, tourist services and sales, educational research, and military institutions. The 1980 year-round population was 9,264. The combined seasonal/year-round population was approximately 35,000 in 1989. A number of the smaller islands have few or no residents.

The communities surrounding the park are significantly affected by the fiscal impacts of the people visiting the park. During the summer, there is a noticeable shift in emphasis to visitor service industries. The influx of seasonal residents increases the population approximately 25%. In addition the large number of weekly visitors significantly changes the social environment of the island.

The effect of the park on the socioeconomic environment is difficult to ascertain because it is difficult to separate all visitors and seasonal residents on Mount Desert Island from just the park visitors. *Visitors and Neighbors of Acadia National Park* (Manning 1987) indicates that 67% of the visitors to the area come to visit the park as their primary destination.

Past economic studies of the impact of the park on the island communities have reported different conclusions. One study in 1974 reported that the tourism-related economy was not as significant a factor as formerly believed. A 1984 study emphasized the negative impacts of the loss of tax revenues on tax-exempt park lands. Lacking from the fiscal analyses has been a comprehensive analysis of the fiscal impacts of hypothetically developing park lands, including the increased capital and annual costs of providing that development with municipal services. A 1989 economic base study by a University of Maine researcher reexamined the economic environment of the four Mount Desert Island communities (Stellpflug).

Residents of the island communities have observed that the park offers recreational and cultural opportunities, provides jobs, increases the costs of land, housing, and taxes, and increases traffic. Traffic has become a serious concern: Vehicle circulation is congested, and parking is restricted in town and village centers.

Regional Recreation

The Acadia/Mount Desert Island area is one of the most intensely used recreation regions in the state of Maine. Only 6% of the Maine Coast is accessible to the public. The park is well located to serve the growing northeastern metropolitan centers. Maine's improving highway system has further opened the area to the influx of tourist traffic.

Public land available for recreational purposes is scarce in this region. Recreation opportunities are available inland in the White Mountain National Forest and state parks. Other significant recreation destinations in Maine include Baxter State Park, the Allagash Wilderness Waterway, and the Moosehead Lake region.

Surrounding Land Use

Both seasonal and year-round populations on Mount Desert Island are increasing. Between 1970 to 1980 year-round population increased by 15%. This increase triggered the construction of new homes throughout the island. Between 1983 and 1986 Bar Harbor experienced a 50% increase in overnight units from 1,500 to 2,256.

The demand for new residences and visitor services has placed increasing pressures on the natural resources of the island. In addition, the demand for residences as summer homes is making housing less affordable for year-round residents.

Where woodlands, wetlands, and farmlands once provided a buffer to the park's natural systems, residential and some commercial development is now encroaching on its boundaries. Formerly, many of the towns did not have zoning or long-range strategies for guiding development and resource protection. Now towns are beginning to undertake a comprehensive planning process in response to a mandate by state growth management legislation.

CULTURAL RESOURCES

In accordance with section 110 of the National Historic Preservation Act of 1966, as amended, the National Park Service conducted an inventory of buildings throughout Acadia National Park during 1984. This inventory identified 169 structures, which are now in the process of being evaluated, with the assistance of the Maine state historic preservation officer, for eligibility for listing on the National Register of Historic Places. Twenty-seven park structures (including bridges) are currently listed on the national register, and more than

40 additional structures may be eligible (Arbogast 1984). The following structures and sites are currently listed on the national register:

Carriage road system and bridges (11/14/79)

Islesford Museum (09/20/80)

Blue Duck Ships Store (09/20/80)

Baker Island lighthouse (03/14/88)

Bear Island lighthouse (03/14/88)

Fernald Point (Saint Sauveur) archeological site (07/21/78)

Based partly on the 1984 inventory, the National Park Service is preparing a parkwide thematic nomination. Historic contexts identified in the nomination are (1) early settlement of Mount Desert Island (1761-1865), (2) the summer colonies (1865-1930), (3) establishment and work of the Hancock County Trustees of Public Reservations (1901-1918), and development of Acadia National Park (1919 to present). Several properties that would be included in the thematic nominations have been nominated individually in the past. Others, such as the Park Loop Road have not been nominated to the register. Still others are listed, but would be renominated to include missing features, such as the designed vistas in the case of the carriage road system. Key historic properties include the following:

Carroll homestead and the associated vernacular landscape: The structure has been nominated to the national register in the past; however, the entire 19th century farmstead has cultural value as an example of typical island life and should be included in the nomination.

Elisha Gilley house and the associated vernacular landscape: The structure has been nominated in the past; however, the entire 19th century farmstead is significant and should be included in the nomination.

Islesford Historical Museum: The property is listed on the national register.

Sieur de Monts springhouse and environs: The structure has been nominated in the past; however, the entire setting created for the structure by George Dorr is significant as a cultural landscape.

Abbe Museum site: The park does not own the national register museum building but does own its environs and the land upon which it sits. It is adjacent to the Sieur de Monts springhouse.

Archeological sites: Most archeological sites of significance are shell heaps commonly found near the shoreline. The Fernald Point site is the most important of these and was excavated and stabilized in 1976-77. The site is owned partially by Acadia National Park and partially by a private landowner, who has granted a conservation easement to Acadia. Other site locations remain unpublished.

Old Farm site: "Old Farm" was the summer residence built by George B. Dorr's parents during the development of the summer colonies on Mount Desert Island. George Dorr lived here year-round in his later years. The site includes the foundations of the home and the ruins of associated structures, such as outbuildings, granite stairways, and shore facilities.

Carriage road system: Some of the roadway, bridges, and gate lodges of the carriage road system are listed on the national register. The cultural landscape encompasses the gatehouse landscapes, the documented roadside vistas, and a corridor extending 150 feet on either side of the roadway. See appendix E, "Carriage Road Restoration, Maintenance, and Use" for specific treatment of the structures, vistas, and land within the carriage road corridor.

Park Loop Road: Not currently listed, the loop road system would fit the theme of development of Acadia National Park. The cultural landscape includes the design features of the road, extending inward from the coping stones, retaining walls, or drainways and extending outward to encompass documented vistas (See appendix D, "Park Loop Road Vistas").

Sargent Drive: This road is not currently listed, but it is similar to the loop road system in significance and features.

Hiking trail system: The network of historic hiking trails crisscrossing the inland portion of the island is among the first recreational hiking trail systems in the United States. Constructed by local village improvement societies largely before the creation of the park in 1916, the earliest date from the late 1880s and early 1890s. At least seven are memorial trails identified by stone or bronze markers. Although not currently listed on the national register, these trails will be included in the forthcoming thematic nomination.

Blue Duck Ship Store: This property is listed on the national register and used for restrooms and maintenance storage. The historic setting may also be of sufficient significance to be nominated.

Storm Beach House: This former summer guest residence is eligible for listing on the national register and is used for park housing. The structure is the key resource.

Bear Island light station: The house is listed and used as a private, seasonal residence under a historic lease with the National Park Service. The historic property includes all the land owned by the National Park Service on Bear Island.

Baker Island light station: The tower, listed on the national register, remains in the ownership of the U.S. Coast Guard. The lightkeeper's house and associated garage, oil house, and other structures are key historic properties. The vernacular landscape surrounding the station is also significant.

Thunder Hole ranger station: The structure is eligible for listing on the national register.

Most historic structures need repair work. For example, slate roof tiles on the Islesford Historical Museum, the gate lodges, and several other historic structures are falling off. Deteriorating mortar of gate lodges and bridges is promoting damage to masonry. Failure of drainage systems coupled with the loss of the impervious carriage road surface over the bridges has resulted in water leaching into the structures. This could be rusting the steel reinforcing bars that support the bridges. Tree roots may also be damaging the structural integrity of carriage road bridges.

Parkwide surveys for prehistoric and historic period sites need to be programmed.

Collections

Acadia houses more than 68,000 artifacts held in three separate groupings. One group, located on Mount Desert Island, contains the Carroll homestead collection of furnishings and tools, the carriages and carriage parts collection, archives and photographs relating to the park's early history, archeological artifacts, and an herbarium. Another group, housed on Little Cranberry Island, contains the Islesford Historical Museum collection of books, maritime and farming implements, furnishings, documents, and photographs. A third group, stored at colleges and universities nationwide, consists of natural science and archeological collections. Environmental controls in current storage facilities are inadequate, and some of the collections are deteriorating. Research requests are not undertaken, and regional requests for data on collections cannot be met. A collections survey and a collection management plan are lacking. The Isleford Historical Museum collection must be transported by boat to Mount Desert Island for conservation work because of the lack of adequate facilities on Little Cranberry Island. Natural science and archeological collections stored at universities have not been accessioned at the park. Without knowledge of or control over these collections, important baseline data is lost.

NATURAL RESOURCES

Air Quality

Acadia National Park is designated a mandatory class I area under the Clean Air Act, which places stringent constraints on air pollution emitting facilities affecting park resources. The act also places constraints on any park development or management activities that could affect air quality by requiring the National Park Service to comply with all federal, state, and local air pollution control laws and regulations.

Although spectacular vistas are still common in Acadia, air pollutants from nearby and distant sources contaminate park air. The park has identified a number of vistas from Cadillac Mountain, Sunset Point, and Duck Harbor Mountain that are integral to the visitors' experience and are worthy of protection and preservation from air pollution and diminished visibility. The state of Maine has incorporated these vistas into its *State Air Quality Implementation Plan*. The park has conducted visibility monitoring since 1980.

Summer ozone levels occasionally exceed state and federal health standards. In 1988, 1989, and 1991, the park warned visitors of potential adverse health effects. The park has had an air quality monitoring program since 1979. The highest ozone concentration ever recorded in Maine was measured at Acadia (Isle Au Haut) on June 15, 1988. Ozone can damage sensitive park vegetation at levels below the state health standard. The park has conducted research since 1982 to determine the cause-and-effect relationships between air pollution and vegetation damage.

One air pollution problem the park hopes to deal with in the near future is idling diesel-powered tour buses. The park will work with the NPS Air Quality Division, the North Atlantic Regional Office, and the Washington Office to minimize or eliminate all unnecessary bus idling.

Acid precipitation in the park, with a pH averaging about 4.4, is ten times more acidic than so-called normal rainfall and may adversely affect plant and animal communities (Kahl et al. 1985).

Water Quality

Lakes and ponds protect important natural resources and provide swimming, fishing, and boating opportunities. In addition some of the larger lakes in Acadia serve as public water reservoirs. Between 1982 and 1984 the aquatic chemistry and impacts of acid deposition were studied in 18 lakes and ponds, and in 23 first- and second-order streams on Mount Desert Island (Kahl et al. 1985). Additional, earlier research has been conducted by the National Park Service, the Water Quality Bureau of the Maine Department of Environmental Protection, the Maine Department of Inland Fisheries and Wildlife, and other agencies. Most of the park's lakes and ponds are thought to have excellent water quality; however, many of them would be sensitive to acidification. The effect of acid precipitation on Acadia's lakes is unclear.

Marshall Brook, which empties into Bass Harbor Marsh, was polluted by leachate from a landfill that operated adjacent to the park from the 1930s through the early 1980s. Because of the environmental impact, the landfill was closed by the Environmental Protection Agency in the mid-1980s. Annual follow-up studies indicate improving water quality in Marshall Brook, but continued monitoring is important (NPS 1990c). Residents and NPS and town officials have voiced concern that nearby Bass Harbor Marsh may also be suffering from pollution caused by improper sewage disposal.

In recent years, concern about radon-222, a naturally occurring radioactive gas found in some well water, has come to public attention. *Giardia*, a water-borne flagellate, is generally believed to be present on Mount Desert Island and has been documented in local dog populations. Although no human cases of giardiasis have been reported on the island, there may be a public health threat to visitors who drink water out of park streams.

Wetlands

Many wetland communities occupy the park's coastal and interior lowlands and widely scattered kettle holes and other small glacial pockets. Wetland types include salt and freshwater marshes, sphagnum-sedge and scrub bogs, alder scrub, and black spruce-tamarack swamps. In addition red maple stands and northern white cedar forests sometimes occupy sites with saturated soils. Wetlands provide habitat for many of the park's plant species of concern.

Salt marshes are flooded daily at high tide. In these marshes, cordgrass predominates with occasional areas of widgeon grass, eelgrass, and sago pond weed. A considerable number of animals typically found in upland sites, such as deer and raccoon, are also dependent upon the marsh, which plays an intricate role in providing a diversity of their typical food. The marshes along the Maine coast lie in the path of the Atlantic Flyway and thus provide important areas for nesting, migrating, and over-wintering birds. Bass Harbor Marsh and the Northeast Creek outlet are two estuarine salt marshes.

Freshwater marshes support other forms of plant life that provide especially valuable habitat for waterfowl species. Fresh Meadow at Northeast Creek and Great Meadow near Bar Harbor are two fine examples of freshwater meadows.

Bogs harbor a group of plants that include many members of the heath family, such as cranberry, leatherleaf, and Labrador tea, as well as sundew and the insectivorous pitcher plant. Sphagnum moss provides a thick, spongy layer. The Big Heath near Southwest Harbor is a good example of a bog and is a Maine critical area.

Black spruce-tamarack swamps occur on acidic, peaty, wet soils, often on the edge of small ponds or freshwater marshes. Associated trees include northern white cedar and black willow.

Executive Order 11990 recognizes the importance of wetland values and directs all federal agencies to protect those values and to avoid the occupation or modification of wetlands. The U.S. Fish and Wildlife Service has mapped wetlands in the region as part of the National Wetlands Inventory.

Wetlands of note are described below.

> Northeast Creek: Upland portions of park land adjoin this wetland, which is listed for acquisition in the 1986 boundary legislation. The freshwater stream and adjacent marshes are used by waterfowl and other marsh wildlife for breeding and migration, and the stream is a popular area for canoeists. A major portion of the wetland is owned by the local chapter of the Maine Audubon Society. Under current ownership, the area is open for hunting and trapping.
>
> Great Meadow: The Great Meadow is a wetland adjacent to Sieur de Monts Spring, Wild Gardens of Acadia. It is visible from the Park Loop Road and the summit of Cadillac Mountain. The wetland is noted for its sizeable colony of *Rhodora*, which borders the wetland in a distinctive magenta fringe in the spring. The meadow is popular with a few trout fishermen, and usually supports some beaver, although the latter often pose a management problem with high water levels and loss of specimen trees in the Wild Gardens of Acadia.
>
> Marshall Brook/Bass Harbor Marsh: Bass Harbor Marsh is a brackish estuary with a dominant vegetation of *Spartina*, marsh grass. The marsh is a major local nesting area for the Acadian race of sharp-tailed sparrow. It also provides resources for nesting and migrating waterfowl and migrant shorebirds. Great blue herons utilize the marsh in the warmer months, and occasionally herons and egrets wandering up from their southern nesting areas use the marsh temporarily. Recently, the marsh has been the subject of studies of water quality degradation from landfill leachate and local sewage (see the discussion under "Water Quality," above). Fishermen report a former population of searun brook trout that no longer live in the brook. Water quality studies show that concentrations of ammonia in the stream reach levels that are toxic to trout.
>
> Bliss Field: The marshes at Schooner Head are heavily utilized by aquatic animals and provide scenic vistas looking seaward from the Park Loop Road or looking towards Champlain Mountain from the Schooner Head Road, which is the winter access road to Ocean Drive. Portions of the marshes are owned by Acadia National Park and some parts are privately owned. The culvert under Schooner Head Road is often plugged by beaver dams and is managed by the town of Bar Harbor. The marshes lie at the base of the Precipice Cliffs and have potential as important feeding grounds for peregrine falcons that have been released in Acadia National Park and may return to nest at the historic aerie on these cliffs.

Island Habitat

The ecologic importance of Maine coastal islands, and particularly the Acadian archipelago, as a system is widely accepted. Many island wildlife species are highly sensitive to human presence. Coastal islands are of special interest because of the large number and diversity of bird species nesting there. Their importance as nesting sites is due to their seclusion and the productive marine environment that provides food for a great variety of wildlife including gulls, terns, scoters, eiders, auks, and petrels. They have been an important nesting area historically; early accounts of explorers such as George Weymouth (1605) and John Smith (1614) described the unbelievable numbers of birds populating the islands.

Maine's island seabird colonies began to decline with the settlement of the Atlantic coast. Habitat disturbance, egg stealing, and commercial harvesting of birds for feathers took a heavy toll. By the turn of this century, the coastal island bird colonies of Maine had virtually disappeared. However, the appalling destruction of the island nesting birds stirred public interest and generated a popular movement to protect avian life. This movement resulted in the passage of bird protection laws in Maine and other states, and the founding of the National Association of Audubon Societies (later, the National Audubon Society) in 1905.

Today, most of these bird species have regained their former abundance. Maine's coastal islands mark the southern breeding limit for several species, including the puffin, razorbill auk, black guillemot, Leach's petrel, and common eider. In addition, the islands are used by many other birds, including at least three species of gulls, three species of terns, cormorants, and occasionally herons and egrets. Maine is the only eastern state in which the eider duck breeds and is the most important harlequin duck wintering area in the western Atlantic.

The survival of the common tern and some other island-nesting birds is in question. Arctic and roseate terns, which often nest with common terns, have also abandoned former nesting islands. Some other locally rare species of interest include Leach's storm petrel and the black poll warbler, known to nest on only two sites near Acadia National Park (Greater Duck and Little Duck islands). In addition, the Atlantic puffin nests on Matinicus Rock, 35 miles southwest of Mount Desert Island. Although the puffin is fairly abundant farther north, it is rare along the Maine coast.

Continuous and well-documented observation by the professional park staff and qualified amateurs has confirmed the gradual extension northward of southern and temperate bird species such as the brown thrasher, mockingbird, towhee, and cardinal. Bald eagles, a federally listed endangered species, and osprey frequent the coastal islands for nesting and roosting. Peregrine falcons, also a federally listed endangered species, have been successfully reintroduced and have bred in the park.

Coastal islands, particularly the smaller ledges, also provide critical habitat for seals. Hundreds of females and their young utilize the small islands of Acadia for whelping each year, and the islands offer haul-outs for the entire local population. A two-year study of the populations and ecology of harbor and gray seals in the vicinity of Acadia National Park has been completed. This study estimates a stable population of 1,600 harbor seals and a seasonal population of 40 gray seals in the waters from Isle au Haut to Petit Manan Reef. All marine mammals are protected under the Marine Mammal Protection Act of 1972 (PL 92-522).

In addition to owning a large portion of both Mount Desert Island and Isle Au Haut, the National Park Service owns some or all of certain coastal islands, as follows: near Mount Desert, the islands of Bear, Thompson, Baker, Sheep Porcupine, Bar (Frenchman Bay), Bar (Somes Sound), The Hop, and Bald Porcupine; near Schoodic Peninsula, the islands of Schoodic, Little Moose, and Pond; near Isle Au Haut, the island of Western Ear. The National Park Service also is the holder of around two hundred donated conservation easements over coastal islands in the Gulf of Maine. These conservation easements serve to limit development and preserve the view of the islands from other islands and from the waters of the gulf, and thereby offer some protection to island habitat. In addition, certain important islands (Long Porcupine, Ship, including the Barges, and Trumpet) are protected by the ownership of The Nature Conservancy.

Maine Critical Areas

In 1974 the 106th Maine Legislature enacted "An Act establishing a State Register of Critical Areas." This act establishes the public's interest in critical areas and directed the State Planning Office to develop an official Register of Critical Areas. The program is designed primarily to provide advice to and coordinate the activities of landowners, government agencies, conservation groups, and others to encourage the conservation of registered areas.

Critical areas are those areas deemed worthy of special planning and management consideration by the Maine State Planning Office because of the natural, scientific, scenic, and historical values they possess. Registered critical areas located in Acadia National Park, except two on Isle Au Haut, are described below.

Bald Porcupine Island: Located in Frenchman Bay, Bald Porcupine Island lies in the mouth of Bar Harbor. About 30 acres in size, the island has both scenic and natural significance. It is one of a few known locations to contain a vigorous stand of luminous moss (*Schistosteoa nennati*). The forest, a white spruce/balsam fir/paper birch type, has been designated as a natural area by the Society of American Foresters. The island also plays host to a nesting pair of American bald eagles and is highly scenic as an important part of the Porcupine Islands archipelago.

Sand Beach: Sand Beach is located on the eastern shore of Mount Desert Island in Newport Cove, which is formed by the presence of Great Head. The beach is an important area in the natural scene of the coast of Maine and is highly used by visitors of Acadia. The major concern is to protect and preserve the sand dune structure from human erosion and deterioration. However, the impacts of intensive use of the beach by visitors would be nil compared to the activities of just one storm.

Big Heath: Big Heath is located at the tip of the western arm of Mount Desert Island in the town of Southwest Harbor. The principal open peatland is about 94 acres, but the critical area includes the surrounding treed bog and drainways totalling roughly 551 acres. Big Heath is included on the Register of Critical Areas because it is an important representative of the coastal plateau peatland type and is in a natural state with a wide buffer zone. The peatland also has two rare plant species, swamp pink (*Arethusa bulbosa*) and baked apple berry (*Rubus chamaemorusi*). The location of Big Heath makes it an important geographic transition point for several plant species, certain hydrologic features, and the coastal plateau bog phenomenon.

Schoodic Peninsula jack pine stand: Jack pine (*Pinus banksiana*) are found at Schoodic Head on the eastern, western, and southern flanks of the mountain as well as at the end of Schoodic Point. Two separate parcels are designated as critical areas. Jack pine stands are important because they are unusual in Maine. The stands also reflect Maine's position in a biogeographic transition zone between the northern hardwood forest and the boreal forest.

Cadillac Mountain jack pine stand: This stand of jack pine is located on the southeastern slope of Cadillac Mountain's southern ridge, approximately 0.1 mile north of the Bar Harbor/Mount Desert town line. At about 1,000 feet in elevation, the critical area includes approximately 7 acres of a dense, nearly monospecific stand.

Salisbury Cove old growth white pine stand: The Salisbury Cove old growth white pine stand is a 185-year-old stand located in an isolated section of Acadia on the north side of Mount Desert Island. This area is outstanding among old growth white pine stands in Maine because of its marine location, a habitat generally unsuitable for white pine. Such stands in Maine are outstanding natural features in that they represent the remnants of the extensive pine forests that shaped Maine's early history. These forests had developed over the centuries, but have since been almost entirely eradicated since colonization. Furthermore, these stands illustrate important points of forest ecology, such as mechanisms of forest establishment and development, the effects of site factors on stand growth, and forest successional patterns.

Bernard Mountain old growth red spruce forest: This stand, dominated by red spruce (*Picea rubens*), covers part of Bernard Peak (1,065 feet) on Western Mountain. The area extends from across Knight Nubble, the drainage valley south of Little Notch, and around to the south ridge of Western Mountain. This uncut stand contains old growth with trees over 200 years old. The average maximum age of red spruce is 162 years. These characteristics are primary reasons for its inclusion as a critical area. The area also provides scenic and educational value.

Sargent Mountain alpine clubmoss rare plant station: Two small populations of alpine clubmoss, *Lycopodium selago*, are located at elevation 1,379 feet near the summit of Sargent Mountain. The first population, about 0.5 acre, is near the north summit trail. The second population is near the north ridge trail. The range of this lycopod extends from the arctic south on mountains to New England and the Appalachians. It is rare in Maine because its moist arctic alpine habitat is naturally scarce.

Great Meadow rare plant station: This critical area, which covers approximately 21 acres, is located in the southeastern quarter of Isle au Haut and includes the entire Great Meadow as well as a buffer strip of woods around it. The Great Meadow is an undisturbed, very wet, sedge-dominated bog with several outstanding botanical features: a very large population of the orchid *Arethusa bulbosa*; the only known Maine population of inkberry, *Ilex alabra*; and one of the few Maine populations of screw-stem, *Bartonia naniculata*. This is a diverse and high quality example of a coastal bog.

Little Moose Island rare plant station: Lying just east of Big Moose Island, Little Moose Island connects to the mainland of Schoodic Peninsula by a gravel bar, visible at low tide. The critical area includes approximately 30 acres of the western portion of the island. Four unusual plants of arctic-maritime affinities reaching their southern limit in Maine grow here. This critical area is a coastal headland community in natural condition with significant scenic, recreational, and educational value.

Schoodic Point marine invertebrate area: This area lies on the western shoreline of Schoodic Peninsula and comprises some 50,000 square meters of tidal zone. The width of the critical area is defined by the ledge rock between upland vegetation down to the extreme low tide mark. Some 27 species occupy this location and qualify it as a significant area.

Potential National Natural Landmarks

The following sites within the park potentially illustrate the geologic and ecologic character of the United States:

Sand Beach
Somes Sound
Day Mountain
Little Moose Island
Big Heath
Otter Point shoreline
Porcupine Islands
Schoodic jack pine

Baker Island
Champlain Valley and Champlain Mountain
Jordan Pond Valley and Jordan Pond Mountain
Dorr and Cadillac mountains
Eagle Lake Valley
Sargent-Parkman Mountain
Echo Lake Valley and mountains
Long Pond Valley
Western Mountains
Duck Harbor Mountain, Isle au Haut
Western Head shoreline, Isle au Haut
South shore of Isle au Haut
Great Meadow, Isle au Haut
Schoodic Point bedrock
Bass Harbor white spruce

Habitat of Plant and Animal Species of Concern

Federally listed endangered and threatened species are determined by the U.S. Fish and Wildlife Service under authority of the Endangered Species Act of 1973 and listed in the *Federal Register*. Endangered and threatened animal species listed by the state of Maine are determined by the Maine Department of Inland Fisheries and Wildlife, and state-listed plant species are determined by the Maine State Planning Office, pursuant to the Maine Endangered Species Acts of 1975 and 1986, respectively.

In keeping with the Endangered Species Act, the U.S. Fish and Wildlife Service was informally consulted concerning endangered or threatened species or critical habitat which could potentially be in the area affected by the general management plan. They advised that two endangered species, the peregrine falcon (*Falco peregrinus*) and the bald eagle (*Haliaeetus leucocenhalus*), were known from the park.

> Peregrine falcons: Probably never more than two pairs of these falcons have inhabited Mount Desert. There are only two former aeries known – one on the steep slope of Champlain Mountain near Bar Harbor, the other on the Eagle Cliffs of Saint Sauveur Mountain bordering Somes Sound. During the late 1950s this species was extirpated as a breeding bird on Mount Desert. Information concerning the falcon prior to 1980 is either inaccurate or incomplete. In 1991 the Champlain Mountain nest site was active and successful with two nestlings observed.
>
> Bald eagles: Bald eagles have traditionally inhabited the state of Maine, including habitats found in Acadia National Park. The Maine Department of Inland Fisheries and Wildlife formulated a bald eagle management plan that is being implemented in cooperation with wildlife personnel from the University of Maine and the U.S. Fish and Wildlife Service. As part of the management plan, an annual census is conducted to determine nesting activity, breeding success, population changes, and perturbation. Surveys indicate that eagles actively utilize areas within the park.

The park also supports 38 plant and 59 animal species officially listed by the state of Maine. Sixteen animal and seven plant species are of concern to park management and are listed in the *Resource Management Plan*. These include possibly extirpated native species, species at the edge of their range, representations of genetic variability, and species whose numbers are so low as to be near minimal viable population.

FACILITY ANALYSIS

There are 136 buildings in the park, including the visitor center and two other information centers, the headquarters complex, 46 housing units, restrooms, concession facilities, and historic structures. Two campgrounds, six large picnic areas, 21 miles of gravel road, 68 miles of paved road, 51 miles of carriage road, numerous bridges, 130 miles of hiking trails, 1,500 signs, and utilities also serve park visitors. Many facilities throughout the park are in need of improvement or replacement.

The architectural style chosen by John D. Rockefeller and his architects for gate lodges link Acadia's cultural and natural landscapes. Characterized by steeply pitched slate roofs and a rustic integration of wood, granite and brick, the design is reminiscent of the French Country Renaissance style of Rochelle, France. Early structures constructed by the National Park Service, such as the Thunder Hole and original Cadillac Mountain ranger stations, harmonized with Rockefeller's structures. They were designed in a rustic architectural style characteristic of early NPS buildings. Several of these rustic park structures survive. However, more recent park construction has not always imitated Acadia's architectural tradition.

Accessibility for Disabled Visitors

Some prominent park features where barrier-free access would be feasible remain inaccessible to visitors with disabilities. The number of accessible bathrooms is limited. Tactile hands-on exhibits and a captioned orientation film are not provided. Most designated accessible campsites at the Blackwoods and Seawall campgrounds are unpaved and too uneven to provide easy access. Accessible restrooms and picnic sites are only available at one of the six park picnic areas.

Access and Circulation

The network of roads serving Acadia is confusing and often congested. The park has numerous entry points and lacks a clear primary entrance that directs people to the visitor center. This problem increases from November to April, when the main visitor center is closed and replaced by a winter visitor center at the park headquarters, which is even more difficult to locate. Furthermore, only a hard-to-find 2-mile segment of the Park Loop Road is plowed for winter auto access.

Park orientation is further complicated by the interwoven system of park, state, and local roads. Despite attempts over the years to clarify signing and road maps, the network of intersecting and meandering one-way and two-way routes confuses vacationers.

The Park Loop Road was carefully laid out to take advantage of some of the most spectacular vistas of mountains and shoreline in the eastern United States and provide a scenic leisurely driving experience. The road also affords motorists intimate views of woodlands, lakes, meadows, and streams. It is comprised of five segments: (1) Paradise Hill Road, (2) Kebo Mountain Road, (3) Ocean Drive, (4) Lower Mountain Road, and (5) Cadillac Summit Road. John D. Rockefeller, Jr., remained an active participant throughout its design and construction. He hired the noted landscape architect Frederick Law Olmsted, Jr., to design the majority of this unique road. Eighteen bridges eligible for listing on the National Register of Historic Places (Arbogast 1984), grace the roadway in a style sympathetic with the carriage road system. Views from the park loop road are its primary value. Documentation of the great sensitivity with which the roadway was designed includes details of the planned sequences of views. Parking was carefully tucked out of sight. Rough-cut blocks of locally quarried granite serve as guardrails, line gutters, and cover culverts. Vegetated shoulders line the narrow, meandering roadway. All of these features make the Park Loop Road a resource worthy of protection.

However, actions have been taken to alleviate traffic congestion without a comprehensive look at its impact on the Park Loop Road. Gravel parking lots have been expanded and paved, vegetative screening has been removed, new lots have been constructed, roads have been incrementally widened, sections have been converted to one-way traffic, intersections have been straightened, ditches have been paved, and bike lanes have been added in disjointed and unsafe fashion. In an effort to provide for the increasing number of visitors, parking has been permitted in the right lane of one-way road segments. Parked cars stretch along more than two miles of the most scenic sections of Ocean Drive during much of July and August. Despite these actions, traffic congestion persists. Vegetation has grown, blocking scenic vistas planned as part of the road design (see the vista study map for the Park Loop Road). Deviations from the original design of the scenic loop road have led to incremental declines in its aesthetic quality. This is particularly true of the right-lane parking and the proliferation of directional and regulatory signs (Steinitz 1988).

The on-grade crossing of the carriage road system at Bubble Pond is on the tightest curve of the loop road. It presents a potentially dangerous conflict between motorists and bicyclists, pedestrians, equestrians, and carriage passengers on the carriage roads. This condition will become increasingly hazardous as the use of the carriage roads increases. Originally, a bridge allowed the loop road to pass under the carriage road, but when the loop road was realigned in the 1940s, the alignment was moved away from the pond and out from under the bridge, creating the current dangerous on-grade crossing. (There is only one other on-grade crossing in the system, at the Jordan Pond gate lodge.)

Between 1913 and 1940 John D. Rockefeller, Jr., directed the construction of a 57-mile system of carriage roads now listed on the National Register of Historic Places. With meticulous attention to state-of-the-art road construction and landscape design, and aided by noted landscape architect Beatrix Farrand, Rockefeller created an extraordinary road system, designed only for nonmotorized vehicles. He and his family donated 50 miles of roads to the park. During his life Rockefeller provided funds to maintain the carriage roads and their associated vistas. Work crews removed horse manure and all dead and down wood along the roadsides "as far as the eye could see" (Rieley 1989a).

Since Rockefeller's death in 1960, the park carriage road system has fallen into disrepair. The situation has become critical. The road crown and clay binder have been lost on the road surface, and drainage systems are blocked by vegetation and collapsing pipes, causing the roads to deteriorate at an increasing rate. Horse manure, loaded with organic material and viable seeds, hastens carriage road breakdown by prompting the growth of vegetation on the road surface. It also disperses seeds of nonnative plants. Roots that have grown onto the carriage roads are also damaging these cultural and recreational resources (Rieley 1989a). Most of the 27 scenic vistas documented in a historic study of the carriage road system have become overgrown. Many other vistas that were obviously planned with care have also become obstructed by tree growth. The gate lodges and bridges, which are also listed on the National Register of Historic Places, are discussed under "Historic Structures."

The Seal Cove road, Western Mountain roads, Lurvey Spring road, and Long Pond fire road are dirt roads open for automobile traffic on a seasonal basis. Unplowed in the winter, they are used by recreational skiers and snowmobilers. All but the Seal Cove road are owned and maintained by the National Park Service. The Seal Cove road is owned by the town of Tremont, but 1986 boundary legislation included the road within the park boundary. Thus, NPS development guidelines apply, and the Park Service may acquire the road.

Interpretive Facilities

The size and layout of the Hulls Cove visitor center does not meet current needs (NPS 1990b). During the peak season, visitors are often unable to find even standing room in the auditorium. The lobby is frequently so crowded that visitors are unable to receive the information they need in a reasonable length of time. Even crowd management and control techniques do not provide an acceptable experience during July and August. From 10 a.m. to 3 p.m., lines to the restrooms regularly extend half-way across the lobby. Design constraints make it challenging to direct visitors to recreational and educational opportunities that meet their needs, particularly at peak season. The condition is exacerbated when busloads of visitors arrive in the already overcrowded facility. Climbing over 50 steps to reach the building presents an inconvenience for some and a safety concern for others. Access for handicapped visitors is confusing, and accessible restrooms are not available. Space to provide first aid is inadequate. The heating and ventilation system in the building is inadequate, and there is no cooling system; employees suffer from excessively warm working conditions from mid-July through September and cold conditions in the spring and fall.

Other interpretive facilities in the park also need attention. Attracting 72,000 visitors annually, the nature center still features temporary exhibits installed in 1959. The exhibits are dated, disjointed in their approach, poorly lit, and visually unappealing. The Islesford Historical Museum also displays 1950s-vintage exhibits, lacking thematic unity. Moreover, without temperature and humidity control, artifacts on display at the Islesford Historical Museum are not properly protected.

Wayside exhibit panels produced in 1979 are no longer being manufactured, and panels damaged by vandalism and weathering are not being replaced.

Abbe Museum

The Abbe Museum of Stone Age Antiquities exhibits artifacts of Maine's native American culture. The trailside museum, listed on the National Register of Historic Places, is located on park land near Sieur de Monts Spring. The building is privately owned, and the museum is privately funded and operated.

When the Museum Trustees donated the 1.5 acre-museum site to the park in 1927, they reserved the right to use an unimproved access road for temporary needs only, such as construction. The Abbe Museum uses the road on a daily basis to access what has become staff parking clearly visible from the museum exhibit area. The road and parked cars impact the aesthetics of the Sieur de Monts area. In the 1927 deed transfer, the museum also retained the option to use the land for future expansion. Currently, the Abbe Museum Board of Trustees is exploring the feasibility of adding an addition two times larger than the existing building in order to build an auditorium and provide space for additional exhibits, offices, and curatorial work space. Concern has been expressed that by tripling the museum's size, services and facilities at Sieur de Monts, an already congested and physically confined area, might be strained. Furthermore, the park's 1986 boundary legislation specifies that expansion of privately owned buildings in the park be limited to 25% of that existing as of November 1985.

Trails

Acadia's hiking trail system boasts some of the Northeast's most outstanding day hikes. According to an Appalachian Mountain Club report, Acadia's trail system is "one of the oldest and most diverse in the United States, offering unique and attractive forest, ocean, and mountain walking and hiking" (Williams 1988). The 130-mile trail system offers a wide variety of experiences, including walks along the seashore, wooded inland paths, boulder strewn trails to bald mountaintops, and historic trails with stone staircases, iron rungs, and ladders. Seven hundred trail signs direct hikers. Some of the earliest recreational hiking trails in America were established here under the auspices of local village improvement societies, several dating from the 1880's.

At present, Acadia does not fund a trail maintenance program. What the Maintenance Division has recently accomplished resulted from special funding, which has now been withdrawn. Heavy use combined with lack of maintenance has resulted in extensive soil erosion, vegetation trampling, and development of social trails, with a corresponding loss of native vegetation and increase in nonnative plant populations. In several sections, granite steps and metal rungs have loosened, and trail signs and markers have been destroyed, making some trails hazardous. The popular trail connecting the visitor center to the carriage road system is steep, which has caused biking and skiing accidents. Approximately 44 miles of trails once maintained in the park have been abandoned. Trails once connecting the park with surrounding communities have been abandoned, necessitating private auto travel to reach nearly all trailheads.

Campgrounds and Picnic Areas

Acadia National Park provides over 500 campsites at two park campgrounds. Parts of both campgrounds were constructed by the Civilian Conservation Corps in the 1930s, and campground design is based on camping vehicles of that era. The date of the last systematic comprehensive rehabilitation of campsites is unknown. Both campgrounds are heavily used during the summer months and Blackwoods is increasingly used during the off-season. The impact of use and limited maintenance is evident: Vegetation loss, soil compaction, and erosion are increasing.

Campsites are not designed with clearly defined areas for placement of camping equipment. This deficiency exacerbates degradation of the sites. At some campsites, soil compaction of the gravel area shared by the camper's vehicle and tent makes it nearly impossible to drive tent stakes into the ground. At other campsites, including the group campground where drainage is poor, heavy rain leaves tents situated in sizeable puddles and encourages campers to dig trenches. Campsites covered with water may remain unusable for several days thereafter. At the Seawall campground, historic masonry fire grates are in poor repair. Because the campgrounds were not designed with RVs in mind, roadways and turning radii are too small for large vehicles. Some campsites are accessible to large RVs only by driving the wrong way down one-way campground roads. Some RVs have been damaged moving in and out of campsites.

Complaints about noise from RV generators are common (there were 32 complaints during quiet hours in 1988), largely due to the integration of tent sites with RV sites. At the Blackwoods campground, the proximity of the group campground to individual campsites also leads to conflicts; the existing five-site group camp area is in an open area with no vegetative buffers between sites surrounded by family camping sites. Groups sometimes cause commotion that disturbs people in individual campsites. The group and family sites share restrooms, which also leads to conflicts. Vehicles parked by visitors attending evening amphitheater programs and extra vehicles brought by campers tax available parking.

The Pretty Marsh picnic area is in need of maintenance. Picnic shelters, structures eligible for nomination to the National Register of Historic Places, are deteriorating. Roof shingles are missing on one. Some of the picnic sites near the shore are located on steep slopes, and the picnic tables lack firm footing.

Concessions

Jordan Pond House and Gift Shops. The Jordan Pond House restaurant serves lunch, dinner, and afternoon tea and popovers. However, the wait for the traditional fare of tea and popovers is often 45 minutes to an hour during peak season. From 11:30 a.m. until 4:00 p.m. throughout July and August three sizeable parking areas fill and overflow causing traffic congestion.

Gift shops are located at Thunder Hole, Jordan Pond, and Cadillac Mountain summit.

Wildwood Stables. Support facilities for the stable operation are inadequate and present an unkempt appearance, in full view of visitors. There is only one unsightly restroom, shared by visitors, employees and campers. The existing historic barn is currently used to stable privately owned horses of visitors who stay in off-site accommodations. Horses used by the concessioner are kept in temporary metal stalls under a tent. Some employees bring their own teams of horses and insist on living within sight of them for security reasons. Nearly all the employees are housed on-site in tents and trailers located within yards of the carriage road entrance route. Sheltered storage is not available for carriage or feed. Paved parking is extremely limited so visitors park on the grass along the main entrance drive.

A large grass area adjacent to the stable serves as primitive campsites for visiting equestrians. Horses (up to 40 at one time), trailers, and tents are permitted in this area. Two rickety hitching rails and two fire grates are the only amenities. Campers tie their horses to hitching rails, trees and trailers. No physical separation is provided between the camping area, the concession operation and the visiting public. This presents a safety concern.

The entrance route to the carriage roads from the stable is steep, dangerous, and subject to erosion.

Restrooms

Heavily used areas, including Thunder Hole, Eagle Lake, Acadia Mountain, and Lake Wood, have no restroom facilities. Adjacent woodlands are littered with evidence of human waste. Potential water pollution is a concern at Eagle Lake, a public water supply, and at Lake Wood, a popular swimming area. In addition, most of the existing park comfort stations are not designed for year-round use and are closed during the spring, fall, and winter. As off-season visitation increases, human waste disposal problems intensify.

Fee Collection Facilities

The prefabricated metal fee-collection facilities installed in 1987 were intended for temporary use only. The existing structures are aesthetically unappealing, susceptible to vandalism, and not secure. High intensity lights mounted on 40-foot poles are lit year-round, flooding the area with light visible from Cadillac Summit and other key places in the park.

The fee station is not located at the park entrance; rather, it is situated ½ mile north of Sand Beach, 9 miles beyond the visitor center on a one-way section of the park loop road. Entrance station rangers frequently greet visitors who bypassed the visitor center and are eager to receive orientation and information. Unfortunately, these rangers can seldom take time to answer questions without creating traffic backups at the fee station. Visitors are often unwilling to follow the complicated directions back to the visitor center, so they leave the fee station without the information they seek.

Collections Storage Facilities

Artifacts are housed in widely scattered locations not designed for or dedicated to collection storage. Most historical objects are stored in facilities that fall far short of meeting NPS curatorial standards (McManus et al. 1989), without proper climate control and without appropriate security. For example, George Dorr's furniture collection is used by NPS residents at Storm Beach House. The carriage collection is stored in a large metal storage shed that is used primarily by the Maintenance Division for vehicle and sign storage. The building provides no climate control or collection security. The Islesford collection is stored in the Blue Duck Ship Store and the museum, where environmental controls are also inadequate. Objects stored in the museum basement have been water-damaged during floods. The park's archeological collection has not been catalogued and is stored at two offsite locations – the Maine State Museum and the University of Maine. The park exercises virtually no control over treatment, exhibition, accountability, or storage of its archeological collections.

Sufficient and appropriate work space is not available for a professional curator or staff. Current storage conditions do not permit ready retrieval for research, interpretation, or display.

Housing

A severe shortage of housing in the park and the high cost of affordable seasonal housing in the nearby communities limits the park's ability to attract the most qualified seasonal employees. The housing shortage also limits the availability of housing to visiting researchers and the cost of research projects climbs when scientists are forced to find costly local housing outside the park. The maintenance operation is allotted very limited staff housing, restricting the park's ability to hire seasonal maintenance employees. Once staffing levels are increased to meet current and projected needs, the housing shortage will become even more severe. The ranger cabin at Schoodic Peninsula lacks office space.

Headquarters

Administrative offices for the park's operating divisions are located in four buildings, hindering communications among the staff. Substantial increases in staff and facilities would be required to adequately address the planning issues. If each division expanded independently and offices were not consolidated, it is likely that communications, and hence staff effectiveness, would not improve.

The current parkwide maintenance facility is housed in a retrofitted, flat-roofed, concrete block building and a prefabricated metal gymnasium. The cement block building suffers from extensive moisture damage and cannot be repaired economically. The gym creates a visual intrusion from the Park Loop Road. Neither building is energy-efficient, there is no work space for electrical and plumbing repairs, and there is no receiving area. Neither building provides sufficient space to shelter valuable equipment and materials.

ANALYSIS OF PARK OPERATIONS

Increasing visitation coupled with budgetary constraints creates problems for all areas of park operations.

Interpretation

Over the past decade, in the face of rising visitation and lengthening visitor season, the number of seasonal NPS staff in the Interpretive Division has remained relatively constant. The NPS cooperating association, the Student Conservation Association, college work-study programs, and an active Volunteer-in-Parks program play a critical role in providing, rather than enhancing basic operations. In 1988 for example, 55% of the staff were not NPS employees, resulting in an overloading of the supervisory staff and a lack of NPS visibility in areas of high visitor use. The number of interpreters working in the visitor center is insufficient to orient all visitors seeking information.

Interpretive programs are often overcrowded. Programs are intentionally scheduled at times of day that will limit audience size to manageable proportions, and some of the most popular programs have been canceled to avoid turning away more visitors than can be served. Furthermore, current funding levels and staffing constraints limit the ability to offer interpretive programs in the expanding spring and fall seasons. Current environmental education programs for school children fall far short of satisfying demand, and the park does not have sufficient funds or staff to conduct media relations, public relations, or community outreach in a well-organized, proactive manner (NPS 1990b).

Coin box donations, commercial donations, grants, and cooperating association donations help finance the park's basic interpretive program. About 60% of the division's budget was provided by outside sources in 1988.

Visitor and Resource Protection

The "Ranger" Division is responsible for protecting park resources, persons, and property, managing visitor use, and providing visitor services such as managing park campgrounds and picnic areas, collecting and processing entrance and user fees, and providing information to visitors.

Visitor and resource protection functions performed by rangers at Acadia are diverse. The division protects natural and cultural resources from direct human damage and physical threats; provides first aid and emergency medical services; conducts the park's fire prevention and suppression program; provides lifeguard services on park beaches; conducts search and rescue; assists or responds to public emergencies outside of the park; and enforces all applicable federal, state and local laws within in the park. For the years 1975 through 1989 there were 2,355 traffic offenses and 5,084 other offenses at Acadia – 561 of a more serious nature such as theft and burglary (495 offenses), poaching, hunting and trapping (241), robbery and assault (33), rape and other sex offenses (26), arson (22), and homicide (3). Although law enforcement incidents have doubled in the past 10 years the number of seasonal patrol rangers has remained constant.

Due to funding and staff limitations, rangers are unable to provide essential traffic control during the height of the visitor season. The park is not sufficiently staffed to provide adequate visitor services during routine patrol and at park campgrounds. Visitor and resource protection, particularly in off-road areas, is also hampered.

Maintenance

Increasing visitation, expanding equipment inventory, and legislation mandating the protection of the park's physical assets have taxed the Maintenance Division's ability to perform most of its functions. The current operational budget severely restricts the park's ability to maintain 136 buildings, 130 miles of trails, over 1,500 signs, 89 miles of roads, 2 major campgrounds, 4 picnic areas, equipment, and grounds. The most critical health and safety issues are addressed, but many requirements are not. The most immediate needs include trail, roadside and carriage road maintenance, and the construction of a sand and salt storage building. The growing backlog of deferred maintenance threatens the park infrastructure even further (see "Trails," "Carriage Roads," "Historic Structures," and "Campgrounds and Picnic Areas").

Natural Resource Management and Science

The division of Natural Resource Management and Science is responsible for baseline species and resource condition inventories, identifying and documenting existing and potential impacts, coordinating research, mitigation and treatment of impacts, resource monitoring, and ensuring compliance with local, state, and federal environmental regulations.

Currently, many resource management functions are supported with short-term project funds. Park research depends on the availability of university scientists, graduate students, and special funding. Even the park's critical air quality monitoring program is financed with annual appropriations from the NPS Air Quality Division. Without base funding, cyclic resource management programs, and institutionalized resource management operations (e.g., monitoring and inventorying), the division's ability to complete projects and carry out long-range planning is hampered (NPS 1990a).

Cultural Resource Management

Historic structures, cultural landscapes, archeological sites, collections and other cultural resources are significant components of the park's resources, yet there is not base funding nor a comprehensive program for cultural resource management. Oversight of cultural resources is a collateral duty of the already fully-occupied chief interpreter. Sporadic and ad hoc cultural resource activities occur, but are reactionary in nature.

Administration

As park staffing, facilities, and equipment increase, administrative services providing support for all other divisions, will be taxed.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Visitor Experience				
Visitor Orientation	Visitor confusion would be substantially relieved by providing a clear primary entrance to the park, direct access to needed orientation at a new visitor center, and a comprehensive sign program.	Same as alternative 1, plus all visitors, including those who did not stop at the visitor center, would receive a basic level of orientation (a park map with information) upon entering the park through the new entrance/fee station.	Similar to alternative 1, except the existing visitor center would be expanded rather than replaced, and access would remain a problem.	With the park's primary entrance purposely kept unclear to avoid exacerbating the already overcrowded conditions at the visitor center, many visitors would continue to miss this entrance and not receive adequate orientation. They would continue to enter at other points and lose their way in the confusing network of poorly signed roads, or seek orientation at the fee station, where it could seldom be provided without causing traffic tie-ups.
	Maintaining the coping stones and other design features on park roads would help visitors distinguish them from town and state roads, thereby facilitating visitor orientation.	Same as alternative 1.		
	Visitors would continue to be confused with the two-way traffic on the Lower Mountain Road when they encounter one-way traffic south of the Jordan Pond House.	Making Lower Mountain Road one-way would reduce confusion and aid orientation.	Same as alternative 1.	Same as alternative 1.
	Winter orientation would be substantially improved at the visitor center, Jordan Pond warming hut, and Sieur de Monts.	Winter orientation would be improved at the visitor center.	Winter orientation services would remain difficult to find.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Understanding/ Appreciation of Park Resources	Visitors' understanding and appreciation of the park's resources would be greatly improved by new interpretive media emphasizing cultural as well as natural resources.	Similar to alternative 1; however, fewer facilities would provide interpretation of the carriage roads; thus visitors' appreciation and understanding of these resources would be less.	Visitors' understanding and appreciation of the park's resources would be somewhat improved by minimal new media interpreting both natural and cultural resources.	Visitors would continue to have an inadequate understanding and appreciation of the park's resources, particularly its cultural resources, as a result of outdated interpretive media focused nearly exclusively on the natural environment.
	Educational programs would be expanded within the park and through the outreach programs. Programs would include up-to-date technical information provided by all park divisions. Volunteers would be utilized for supplemental programs.	Same as alternative 1.	Similar to alternative 1, but park outreach programs would be extremely limited.	Lack of adequate staff and funding would force basic interpretation by sources other than park staff. During peak season, more visitors would be turned away from interpretive programs than were served. Environmental education programs woudl fall short of satisfying demand. Community outreach programs would not be developed.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Visitor Safety	Safety for bicyclists, pedestrians, and motorists would be improved by prohibiting overflow parking in the right lane of the Park Loop Road and on the road shoulders, and by encouraging bicyclists to use the restored carriage roads as an alternative to the Park Loop Road.	Same as alternative 1, plus safety would also be improved along the one-way Lower Mountain Road.	Potential safety hazards for motorists, bicyclists, and pedestrians would be perpetuated and increased by extending overflow parking into the right lane of the Lower Mountain Road.	Same as alternative 3.
	A safety hazard for bicyclists would be eliminated by the removal of the bike lanes from the approach to Cadillac Mountain.	Same as alternative 1.	Bicyclists using the bike lanes on the approach to Cadillac Mountain would continue to be forced dangerously close to granite coping stones and the steep side slopes of the waterways.	Same as alternative 3.
	A safety hazard for pedestrians, bicyclists, and horse and carriage riders would be eliminated by providing a bridge crossing over the Park Loop Road at Bubble Pond.	A safety hazard for pedestrians and bicyclists would be eliminated by providing an underpass under the Park Loop Road at Bubble Pond. (Horse and carriage riders would no longer use this portion of the carriage road system.)	A safety hazard for pedestrians, bicyclists, and horse and carriage riders would be somewhat reduced by converting the Park Loop Road to one-way in the vicinity of the on-grade crossing with the carriage road near Bubble Pond.	The on-grade crossing of the Park Loop Road near Bubble Pond would continue to present a safety hazard to bicyclists, pedestrians, and horse and carriage riders using the carriage road.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	A potential hazard to equestrians and the general public would be removed by requiring all horses to be stabled in the barn at Wildwood Stables.	A potential hazard to equestrians and the general public would be removed by constructing fencing to separate horses in the camping area from the general public.	Same as alternative 2.	Horses tethered outdoors would continue to pose a potential hazard to equestrians and visitors seeking carriage rides.
Crowding	The amount of future crowding in the most popular areas of the park would be reduced by slowing the rate of growth in visitation during July and August and by dispersing visitor use throughout the year and throughout more of park. As a result, more of the park would receive heavier use over a longer season than is currently the case.	The amount of future crowding in the most popular areas of the park would be reduced by stopping growth during July and August and by dispersing existing levels of summer use more evenly on the east side of Mount Desert Island.	Without attempts to manage tourism, visitation would continue to increase during the peak and shoulder seasons, resulting in more crowding throughout the park.	Same as alternative 3.
Opportunities for Scenic Driving and Automobile Access to Park Sites	The aesthetic qualities of the Park Loop Road would be improved by protecting and enhancing the original design intent, especially by restoring and maintaining the scenic vistas.	Same as alternative 1, plus the aesthetic qualities of the beautifully designed Stanley Brook Road would be ensured by closing the road to RVs, thereby eliminating any need to widen or realign the road to accommodate oversized vehicles.	The existing qualities of the Park Loop Road would be retained by protecting the design intent from further degradation and by maintaining vistas. However, right-lane parking would continue and be extended to more of the road, contributing to increased traffic and parking congestion and detracting from the aesthetic quality of the drive.	The aesthetic qualities of the park loop road would continue to be degraded by lack of maintenance of vistas, incremental changes to the original design intent, and increasing traffic and parking congestion.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	The scenic driving experience would be more relaxed. Drivers' worries about car doors opening, pedestrians stepping out between cars, bicyclists sharing the single travel lane, and restrained driving maneuverability would be greatly reduced by eliminating right-lane parking and encouraging bicyclists to relocate to the carriage road system.	Same as alternative 1.	Drivers worries about car doors opening, pedestrians stepping out between cars, bicyclists sharing the single travel lane, and restrained driving maneuverability would be increased by allowing right-lane parking on more of the Park Loop Road. Bicycle traffic would be expected to increasingly conflict with automobile traffic.	Similar to alternative 3. Although additional right-lane parking is not proposed in this alternative, it might be implemented in the future.
	Automobile traffic on the Park Loop Road would decrease as people took advantage of the park shuttle bus and new nonvehicular accessways into the park.	Automobile traffic on the Park Loop Road would either remain at existing levels or decrease if a shuttle bus service was provided.	Automobile traffic on the Park Loop Road would continue to increase, and this coupled with additional right-lane parking would cause increased congestion.	Automobile traffic on the park loop road would continue to increase, causing increased congestion.
	Traffic flow throughout the loop road system would be improved by limiting RVs once a shuttle bus was operational.	Traffic flow would be improved on the Cadillac Mountain Road by placing size restrictions on RVs and on the Stanley Brook Road by prohibiting RVs. RVs would continue to periodically slow traffic flow on other road segments during heavy use periods.	RVs would continue to periodically slow traffic flow and contribute to parking congestion, especially in parking lots with limited maneuverability.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	The problem of gridlock on the summit of Cadillac Mountain would be alleviated by instituting size limits on RVs and eliminating overflow parking.	Same as alternative 1.	The problem of gridlock on the summit of Cadillac Mountain would be alleviated by converting Lower Mountain Road to one-way traffic, which would require a longer drive for some visitors and reduce use levels.	Crowding, traffic congestion, and gridlock would continue to detract from the visitor experience on Cadillac Mountain during the peak visitor season.
	Enforcing the design capacity of parking lots would frustrate those visitors who were unable to find parking at sites they wished to visit. As many as 440 cars that are currently parked in the right lane of the park loop road or on the road shoulders during peak use periods would be unable to find parking. As many as 140 cars that currently find overflow parking on the summit of Cadillac Mountain would be unable to park there in the future. However, implementation of the shuttle bus system would give visitors a viable alternative means of access.	Same as alternative 1 assuming a shuttle bus was provided by the private sector to serve park visitors. If shuttle service was not provided, the number of people able to visit popular park features would be reduced to the number that could be served by the existing parking lots.	Enforcing the parking lot capacities at Sand Beach, Echo Lake Beach, Cadillac Mountain, and Sieur de Monts would frustrate visitors who were unable to find parking at these sites. However, additional right-lane parking along the Lower Mountain Road might offset the effect of the restrictions.	Parking would not be reduced, and visitors would have the same opportunity as now to find a parking place.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	RV drivers would be inconvenienced by having to leave their vehicles outside the park and find alternative means of access. However, implementation of the shuttle bus system would give these visitors alternative transportation to and through the park.	Prohibiting RVs from the Stanley Brook Road and restricting RV use of the Cadillac Mountain road would inconvenience some RV drivers. If shuttle bus service was not provided, some RV owners would have no alternative means of access for visiting these areas.	RV drivers would have more parking available to them once additional right-lane parking was designated.	RV drivers would have the same access and parking opportunities as at present.
	Visitors who chose to ride the shuttle bus would be able to enjoy the scenery without the distraction of driving.	Same as alternative 1 if shuttle bus was provided by the private sector.	Visitors would not have the option of riding a shuttle bus, since none would be provided.	Same as alternative 3.
Opportunities for hiking, bicycling, horseback riding, and carriage rides.	Opportunities for hiking, bicycling, horseback riding, and carriage rides would be greatly enhanced by the restoration of the carriage road surfaces and vistas, providing more aesthetically pleasing, safer, and more relaxing routes for those activities.	Same as alternative 1.	Opportunities for hiking, bicycling, horseback riding, and carriage rides would be enhanced by improved maintenance of the carriage roads; however, since the roads would not be restored and the vistas would not be cleared, the carriage roads would not be as aesthetically appealing to visitors as they would be under alternatives 1 and 2.	Opportunities for hiking, bicycling, horseback riding, and carriage rides would remain unchanged. Many bicyclists would prefer the Park Loop Road to the poorly maintained carriage roads.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Opportunities for hiking would be enhanced by improved trail maintenance, which would make trails more aesthetically pleasing and safer, and by better information, which would make visitors more aware of all the available hiking options.	Similar to alternative 1, but access would be managed to provide a range of use levels on various trails.	Opportunities for hiking would be enhanced by a new trail guide, which would make visitors more aware of the available options. Trails might continue to deteriorate if the volunteer trail maintenance program was not adequate to keep up with ongoing trail damage.	Opportunities for hiking would continue to decrease as trails deteriorated.
	New trail connections and public transportation from local communities would make it easy for hikers and bicyclists to get to the park without having to drive or find a parking space. Hikers and walkers who chose to ride the shuttle bus could travel from point to point, without having to make a loop or double back.	Public transportation, if implemented, would make it easy for hikers to travel to and in the park without having to drive or find a parking space and without having to loop or double back to their vehicles. If public transportation was not provided, some hikers, as well as bicyclists, would be frustrated by not being able to find parking near their desired trailheads.	Most hikers and bicyclists would continue to drive into the park. For awhile, it would be easier to find a parking space at Jordan Pond, Bubble Pond, and Bubble Rock because of the additional right-lane parking. Eventually, however, increasing demand would exceed the new parking capacity, and hikers and bicyclists would be increasingly frustrated by not being able to find parking near their desired trailheads in all parts of the park.	Similar to alternative 3. Although additional right-lane parking is not proposed in this alternative, it might be implemented in the future.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Access to a popular part of the carriage road system would be improved by providing additional parking for all visitors, including people with disabilities, at Eagle Lake.	Some visitors wishing to use the restored carriage road system in the Eagle Lake area would be frustrated by not being able to find a parking space.	Same as alternative 2.	Parked cars would continue to overflow the existing lots at Eagle Lake, blocking the bike lane.
	Some hikers would be frustrated by finding specific trails closed periodically to protect critical habitats. An effective education program would ease their objections.	Some hikers would be frustrated by finding specific trails eliminated or periodically closed to protect critical habitats. An effective education program would ease their objections.	Same as alternative 1.	Same as alternative 1.
	Trail users seeking solitude would be disappointed by increasing use of what are now the less heavily used trails along State Route 3, the Western Mountains, and the carriage roads.	Trail users seeking solitude would still be able to find it on trails in specific areas on the east side of Mount Desert Island and in the Western Mountains, although not along the carriage roads.	Trail users seeking solitude would still be able to find it on the trails along State Route 3, the Western Mountains, and to some extent along the carriage roads.	Trail users seeking solitude would still be able to find it on the trails along State Route 3, the Western Mountains, and the carriage roads.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Opportunities for horseback riding and carriage driving for persons bringing their own horses would be increased by opening the south portion of Eagle Lake to horses, thus providing a quick connection between the two main carriage road loops.	Opportunities for horseback riding and carriage driving for persons bringing their own horses would remain unchanged. Most riders would remain in the Day Mountain area since all horse trailers would be required to park at Wildwood Stables.	Similar to alternative 2 except there would be no restrictions on horse trailer parking.	Same as alternative 3.
	Opportunities for the general public to take a carriage ride would be increased by opening a second staging area for the carriage concession at the Brown Mountain gate lodge. The addition of smaller carriages would give visitors a variety of ride options to choose from.	Opportunities for the general public to take a carriage ride would be limited to small carriages and buckboards in the Day Mountain area.	Same as alternative 2.	The general public would continue to have opportunities to ride in large or small carriages or hay wagons in the Day Mountain area.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	People with their own horses and carriages would be able to keep their horses overnight in the park once additional stabling facilities were available at Wildwood Stables. Camping facilities would be limited to developed sites. Substantially increased fees would make stabling and camping too expensive for some of the traditional users.	Fewer people with their own horses and carriages could stay overnight in the park at Wildwood Stables. A maximum of 20 horses would be permitted at one time.	Horse camping would remain at current levels (a maximum of 40 horses at one time).	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Increased conflicts between hikers, bicyclists, and horse and carriage riders might result from increased use of the carriage roads by all categories of users. Bicyclists would have to negotiate loose, steep surfaces if horses were allowed on the particularly steep portion of the carriage road system south of Eagle Lake.	The potential for conflicts between horse users and others would be reduced by increased separation of user groups. Most horse and carriage riders would remain on the Day Mountain carriage roads. The concession operation would be generally restricted to that area. No horses would be allowed on the Witch Hole Pond and Eagle Lake loops, which are the most popular routes for bicycling and hiking. Also, people trailering their own horses would have to park and disembark from Wildwood Stables, which would tend to concentrate horse use in the Day Mountain area.	Similar to alternative 2. Some riders and carriage drivers with their own horses might disperse to additional sections of the carriage road system used principally by bicyclists and hikers.	Conflicts between hikers, bicyclists, and horse and carriage riders would increase as use increased. The horse and concession operation would be generally restricted to the Day Mountain area; however, people with their own horses and carriages could continue to park and disembark at any parking lot, which would help them disperse throughout the carriage road system. The poorly maintained carriage road system would not be highly attractive to bicyclists. The Witch Hole Pond and Eagle Lake loops would continue to be reserved for bicyclists and hikers.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Opportunities for Low-Density Recreation	Opportunities for low-density recreation in what are now the lesser known areas on the west side of Mount Desert Island and during what are now the low-use seasons would be gradually eroded by dispersing visitor use throughout the year and throughout more of park. Visitors seeking solitude and low-density recreation on Mount Desert Island would be increasingly disappointed, although some opportunities for these kinds of experiences would remain on Schoodic Peninsula and the offshore islands.	Opportunities for solitude and low-density recreation would be retained in specific areas on the east side of Mount Desert Island, much of the west side of Mount Desert Island, Schoodic Peninsula, and the offshore islands.	A gradual loss of solitude and opportunities for low-density recreation could be expected as visitors eventually dispersed themselves throughout more of Mount Desert Island.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Opportunities for Winter Use	Cross-country skiers and snowmobilers would easily find adequate information and trailhead parking at the new visitor center. Skier access to the carriage road system from this location would be greatly facilitated by rerouting the trail.	Same as alternative 1.	Cross-country skiers and snowmobilers would continue to have difficulty finding the winter visitor center at park headquarters, with the result that many would not receive adequate information about winter use opportunities. Visitors using the summer visitor center parking lot as a staging area would not have restrooms available at that location.	Cross-country skiers and snowmobilers would continue to have difficulty finding the winter visitor center at park headquarters, with the result that many would not receive adequate information about winter use opportunities. Relatively few visitors would take advantage of the large plowed parking lot at the summer visitor center because of the difficulty of access to the carriage road system from that location and the lack of restrooms.
	Opportunities for cross-country skiing would be increased by directing visitors to the Jordan Pond area, where a variety of loops would be available and where snow cover often lasts longer than on other sections of the carriage road system.	Winter use would remain concentrated at Eagle Lake and the new visitor center.	Winter use would remain concentrated at Eagle Lake, where parking facilities are extremely inadequate.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Cross-country skiers seeking solitude would be disappointed by the increased use of the Jordan Pond carriage roads, since more people would be attracted to that area by the concession operation.	Cross-country skiers seeking solitude would find it on the Jordan Pond carriage roads.	Same as alternative 2.	Same as alternative 2.
	Parking congestion at Eagle Lake and Witch Hole Pond would be alleviated by dispersing winter use.	Visitors would occasionally have difficulty finding parking at Eagle Lake and Witch Hole Pond.	Same as alternative 2.	Visitors would occasionally have difficulty finding parking at Witch Hole Pond. Parking would often overflow onto the road shoulders at Eagle Lake.
	Skiers' and snowmobilers needs for information, shelter, restrooms, and refreshments would be adequately met by the new warming hut facilities at Jordan Pond and the winterized restrooms at the visitor center and Sieur de Monts.	Skiers and snowmobilers needs for information and restrooms would be adequately met.	Skiers and snowmobilers needs for restrooms would be minimally met.	Skiers and snowmobilers needs for information and restrooms would not be adequately met.
	About 4 miles of plowed roadway would be available for scenic driving. Information at the new year-round visitor center would make more visitors aware of this scenic driving opportunity.	A 2-mile section of plowed roadway would be available for scenic driving. Information at the new year-round visitor center would make more visitors aware of this scenic driving opportunity.	Similar to alternative 2, except the road would remain hard to find for visitors who did not receive adequate orientation.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Accessibility/ Comfort of Park Facilities	The new visitor center would be easily accessible to all visitors, including visitors with disabilities.	Same as alternative 1.	The expanded visitor center would have a redesigned entrance; however, it would continue to pose access problems because of differences in grade between the parking lot and the building entrance.	The 50 steps to the existing visitor center would continue to present an accessibility and health concern for some visitors. Visitors and employees would continue to suffer the discomforts of poor heating and air conditioning.
		Providing two theaters in the new visitor center would improve efficiency and access to information and offer flexibility in programming during slower periods.		
Availability of Community Tourist Accommodations	With a slowing in the amount of new overnight accommodations provided, some visitors might be unable to find accommodations in July and August.	Similar to alternative 1. Some additional visitors might be disappointed because there would be no growth in summer tourist facilities.	No impact. Most demand for summer facilities would continue to be satisfied.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Cultural Resources*				
Carriage Roads	The carriage road system and vistas would be rehabilitated, and their long-term preservation would be ensured through adequate maintenance. The potential for adverse effects caused by increasing use of horses over the majority of the system would be mitigated by ensuring that manure was removed in a timely fashion and that the surface was rolled often enough to avoid erosion resulting from the impact of horse hooves on the road surface. Increased horse use prior to restoration or during wet periods could have a devastating effect, especially where foundation stones were exposed.	Similar to alternative 1. The potential for adverse effects caused by horses would not be as great under this alternative.	Maintaining only the road surface and the drainage areas would slow deterioration of the carriage roads but would not ensure the long-term preservation of these national register cultural resources.	The carriage roads would continue to deteriorate. Without adequate surface maintenance, the stone paving would continue to loosen and erode, leading to a broken, unusable ruin.

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*Undertakings requiring consultation under section 106 of the National Historic Preservation Act are listed in appendix I.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Trail System	The historic trail system would be adequately maintained to ensure its long-term preservation.	Same as alternative 1.	If the volunteer program proved inadequate to keep up with ongoing trail damage, the trail system would continue to deteriorate, eventually resulting in the loss of some trail segments.	The trail system would continue to deteriorate, and additional hazardous sections of trail would have to be abandoned.
Historic Structures	Historic structures would be stabilized and maintained to ensure their long-term preservation. Adaptive use of the Brown Mountain and Jordan Pond gate lodges for interpretive and concession use would require interior and exterior modifications to make the structures accessible to visitors with disabilities and to provide public restrooms, which might compromise their historical integrity.	Historic structures would be stabilized and maintained.	Same as alternative 2.	Historic structures would continue to deteriorate.
Collections	Collections would be adequately treated and stored on site to ensure their long-term preservation. Natural history and archeological collections would be accessioned and cataloged.	Same as alternative 1.	Same as alternative 1.	Museum collections would not be adequately treated or stored, with the result that some items would deteriorate or become lost.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Islesford Museum	The historical integrity of the Islesford Museum would be adversely affected by construction of an addition onto that structure.	Same as alternative 1.	Same as alternative 1.	The Islesford Museum structure would not be affected.
Archeological Resources	Survey, monitoring, and stabilization of archeological resources would help ensure their long-term preservation.	Same as alternative 1.	Same as alternative 1.	Some archeological resources might be documented and lost.
Natural Resources				
Scenic Quality	Scenic quality would be improved by enforcing the design capacity of parking lots, eliminating right-lane parking, and maintaining vistas. Perceptions of crowding would be reduced.	Same as alternative 1.	The lines of parked cars would detract from the scenery and present an image of a crowded, urban setting.	Same as alternative 3, plus scenic quality might be further degraded by incremental expansion of parking and roads.
	Minimal mowing of the Park Loop Road shoulders and planting of vegetation to screen parking would create the impression of a more natural environment.	Same as alternative 1.	Same as alternative 1.	Without adequate vegetative screening, parked cars would continue to be highly visible in some locations, detracting from the natural scene along the park loop road.
	Carriage road vistas would be maintained.	Same as alternative 1.	26 of the scenic vistas would be maintained.	Many scenic vistas would continue to be overgrown.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	The potential for private development to degrade the scenery would be reduced by providing planning assistance to private landowners, encouraging them to develop lands in ways that would protect scenic vistas and opportunities to view wildlife and historic sites.	Same as alternative 1.	Limited staff and funding would inhibit cooperation with surrounding communities for protection of visual resources, with the result that private development would be more likely to degrade visual quality and decrease visitors' opportunities to view wildlife and historic sites.	Same as alternative 3.
	New and upgraded facilities at Wildwood Stables would improve the appearance of the site.	The unsightly facilities at Wildwood Stables would continue to intrude upon the natural scene.	Same as alternative 2.	Same as alternative 2.
Floodplain Values	An addition to the Abbe Museum could potentially affect the floodplain of Cromwell Brook. The National Park Service would work with the museum board of directors to ensure that the site would be designed to avoid floodplain disturbance. There would be no new alteration or modification of floodplains from NPS actions.	No new impacts.	Same as alternative 2.	Same as alternative 2.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Wetlands	Up to ½ acre of riparian wetlands might be affected by construction of a bike trail from the Mount Desert Island High School to Duck Brook Road. If possible, wetlands would be avoided in the siting of the trail. If necessary, bridges or other structures would be constructed to mitigate wetland disturbance.	No new impacts.	Same as alternative 2.	Same as alternative 2.
	The invasion of wetlands by exotic purple loosestrife would be systematically controlled.	Same as alternative 1.	The invasion of wetlands by exotic purple loosestrife would continue to be slowed by occasional removal.	Same as alternative 3.
Prime and Unique Farmlands	No new impacts.	Same as alternative 1.	Same as alternative 1.	Same as alternative 1.
Habitat	New trail connectors would further fragment wildlife habitat.	New new impacts.	Same as alternative 2.	Same as alternative 2.
	Plowing and salting of additionl sections of the Park Loop Road would introduce intrusions and pollutants into previously undisturbed areas.	New new impacts.	Same as alternative 2.	Same as alternative 2.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Intertidal Zone	The reestablishment of more natural intertidal communities would be supported by improved interprettion, monitoring, and interagency protection of the intertidal zone to reduce the risk of collecting and trampling of organisms.	Same as alternative 1.	Same as alternative 1.	Although past impacts on the intertidal zone in the park have not been researched, park staff and others believe that trampling and collecting have caused substantive reductions in the numbers of anemones, shellfish, and other organisms along Ocean Drive and at Anemone Cave and other areas of high visitor use. The effects of such reductions and risks of further reductions would continue.
Bald Eagles	The level of protection afforded to bald eagles would be enhanced.	Similar to alternative 1.	Eagles would continued to be protected and monitored. No new effect.	Same as alternative 3.
Peregrine Falcons	Peregrine falcons would continue to be protected and monitored. No new effect.	Same as alternative 1.	Same as alternative 1.	Same as alternative 1.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Protected Plants	Proposed construction sites and areas to be affected by vista clearing have not been surveyed for protected plant species. Prior to initiating any action, sites would be surveyed for protected species, and remedial measures would be taken if necessary.	Same as alternative 1.	No impact.	Same as alternative 3.
Maine Critical Areas	Sand Beach, a designated Maine critical area, would continue to receive concentrated visitor use; however, current use levels do not appear to jeopardize the geological values for which the site was listed. Risks to critical area biological resources would be reduced by improved public education, monitoring, and active management.	Similar to alternative 1. Elimination of right-lane parking without guarantee of a shuttle bus would reduce visitor use of these areas, with a corresponding reduction in potential for impacts.	Sand Beach, a designated Maine critical area, would continue to receive concentrated visitor use; however, current use levels do not appear to jeopardize the geological values for which the site was listed.	Same as alternative 3.
	Risks to biological resources at mountain summits and on small islands would be reduced by temporary trail closures and other measures to protect sensitive resources.	Same as alternative 1.	Trampling and disturbance by visitors would continue to pose risks to biological resources at mountain summits and on small islands.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Water Quality	Providing the proposed toilet facilities at Thunder Hole, Eagle Lake, Lake Wood, and Acadia Mountain would reduce the potential for bacteriological contamination of surface waters from improperly disposed human waste.	Same as alternative 1.	A lack of toilet facilities at Eagle Lake, Lake Wood, and Acadia Mountain would continue to result in improperly disposed human waste around the sites. This might cause occasional localized bacteriological contamination of surface runoff waters.	A lack of toilet facilities at Thunder Hole, Eagle Lake, Lake Wood, and Acadia Mountain would continue to result in improperly disposed human waste around the sites. This might cause occasional localized bacteriological contamination of surface runoff waters.
	Expanding the development at Wildwood Stables and increasing the concentration of stock at the site could increase the potential for bacteriological contamination and nutrient enrichment of Wildwood Creek; such contamination would be mitigated or avoided through proper design and operation of the site.	No new effect.	Same as alternative 2.	Same as alternative 2.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Proposed new construction at the Hull Cove visitor center, the Abbe Museum, Bubble Pond, and Wildwood Stables, along with restoration of the carriage trail system and construction of new bikeways, could temporarily increase sedimentation of adjacent surface waters; however, use of silt fences and other siltation control devices, as well as proper site design, would mitigate or avoid adverse effects. No effects from NPS operations would be anticipated.	Proposed new construction at the Hull Cove visitor center, Bubble Pond, and possibly Wildwood Stables, along with restoration of the carriage trail system, could temporarily increase sedimentation of adjacent surface waters; however, use of silt fences and other siltation control devices, as well as proper site design, would mitigate or avoid adverse effects. No effects from NPS operations would be anticipated.	Construction of an addition to the visitor center would be unlikely to cause any significant water quality impacts.	No new impacts
	Through the development of a comprehensive, interagency water resource management plan, the ability to identify and respond to water quality threats would be improved for the park and Mount Desert Island.	Same as alternative 1.	Through the development of an NPS water resource management plan, the opportunity to identify and correct critical water quality threats would be improved for the park.	A relative lack of coordination among the National Park Service and other federal and state water regulatory agencies would continue, limiting the efficiency of monitoring and protection efforts.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
Air Quality	Air quality would be improved through cooperative regulatory work by the National Park Service to reduce threats to park resources and human health, efforts to improve visibility, air monitoring, and reporting of findings to the public.	Same as alternative 1.	Same as alternative 1.	Effects of air quality monitoring on local conditions would be minimal.
Surrounding Communities				
	Because visitor satisfaction would be increased through the cumulative effect of actions under this alternative, the area's reputation as a high-quality tourist destination would be maintained, with positive impacts on the local service and retail economy.	Same as alternative 1.	Though visitor satisfaction might not be as high under this alternative as under alternatives 1 and 2, park visitors would still have a positive effect on the local economy.	Visitor satisfaction with the park would decline. Dissatisfaction might reach a level that would have a negative impact on the local economy.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Area service and retail businesses would benefit from a longer, more stable season and avoid expansion costs required to keep pace with escalating peak-season visitation. Similarly, municipal services and staffing for capital investment in infrastructure required by rising peak-season visitation would be avoided.	Same as alternative 1.	Peak season visitation would continue to rise, requiring businesses and municipalities to invest in expansion to keep pace with increased demand. Profits during peak season would be greater, but the season would continue to be relatively short and volatile.	Same as alternative 3.
	Businesses would be more dependent upon local residents and retirees for employment than upon college students due to the longer visitor season.	Same as alternative 1.	There would be less change in employment needs without tourism management strategies to extend the visitor season.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	A park shuttle bus, Mount Desert Island public transportation, and alternative access routes for bicycling and hiking would reduce traffic congestion on area roads. There would be a moderate increase in the number of buses on local roads. Reduction of parking within the park would result in more parked cars within the communities, but primarily at hotels, motels, and campgrounds.	Provision of shuttle buses by the private sector would be encouraged (not guaranteed) and no new accessways would be constructed. Reduction of parking within the park would result in increased traffic and parking in the surrounding communities.	Traffic congestion on local roads would continue and might increase.	Same as alternative 3.
	Safety would be improved on area roads through elimination of overflow parking.	Same as alternative 1.	Same as alternative 1.	Overflow parking would perpetuate safety problems on local roads.
	Municipal water supply watersheds, wildlife habitat, key vistas, historic sites, and other natural and cultural resources of value to the towns would be protected as towns took advantage of technical assistance offered by the National Park Service.	Same as alternative 1.	Natural and cultural resources of value to the towns would not benefit from NPS technical assistance.	Same as alternative 3.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Cooperative research and monitoring of water quality would reduce the negative effects of pollution on public health and natural resources.	Same as alternative 1.	Water protection would suffer from lack of coordinated local, state, and federal efforts.	Water quality might decline, resulting in potentially negative impacts on public health and natural resources.
	Cooperative research and management of species and habitats in the park and on adjacent lands would aid towns in protecting critical natural resources identified in comprehensive town plans. Reporting of findings to the public would improve the ability of citizens to participate in the land use decision-making process.	Same as alternative 1.	Limited efforts by the park staff would provide minimal assistance to towns to protect critical natural resources.	Same as alternative 3.
	The park's fire management plan would complement municipal efforts to improve safety through reduced fuel levels and other presuppression actions.	Same as alternative 1.	Lack of presuppression actions would perpetuate existing fire safety concerns.	Same as alternative 3.
	New restrooms would reduce potential health threats to Mount Desert Island municipal water supplies and public swimming beaches.	Same as alternative 1.	Same as alternative 1.	Potential health risks would intensify.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	Mount Desert Island employers would benefit from cooperative affordable housing on private lands for seasonal employees.	NPS employee housing would be constructed inside the park, with no benefit to area businesses.	Same as alternative 2.	Seasonal housing would be limited in the park as well as in the community.
	Area businesses would be minimally affected by an increase in the Wildwood Stable concession and closure of the Thunder Hole gift shop.	Area businesses would be minimally affected by closure of the Thunder Hole gift shop.	Same as alternative 2.	Area businesses would be unaffected by park concessions.
Employees	The new park maintenance facility would be accessible to all existing and potential employees, including people with disabilities. Park offices and other facilities would be improved to make them fully accessible in a piecemeal fashion as funding became available.	The existing maintenance facility would be improved and made accessible to all employees, including people with disabilities. Other facilities would be made accessible in a piecemeal fashion, as in alternative 1.	Park offices and other facilities, including the maintenance facility, would be improved in a piecemeal fashion to make them fully accessible to all employees, including people with disabilities.	Most buildings would remain inaccessible to people with disabilities.

Table 5: Impact Analysis, Alternatives 1-4

Impact Topic	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Action	Alternative 4: Status Quo
	New and replacement staff facilities would improve quality and increase quantity of housing, which would benefit hiring and staff morale.	Similar to alternative 1, except all housing would be within the park rather than shared with the communities.	Same as alternative 2.	A severe housing shortage coupled with costly seasonal housing in the surrounding communities would continue to limit the park's ability to attract the most qualified employees and visiting researchers.

Table 6: Land Disturbance, Alternatives 1-3

	Alternative 1: Dispersed Use	Alternative 2: Managed Use	Alternative 3: Minimum Requirements
Abbe Museum	0.5/hemlock	0	0.2/hemlock
Lake Wood	0.01/birch-aspen	0.01/birch-aspen	0
Acadia Mountain	0.005/spruce-fir	0.005/spruce-fir	0
Eagle Lake	0.3/mostly disturbed land and birch-aspen; minor amounts of spruce-fir and northern hardwood	0.01/disturbed	0
Thunder Hole	0.01/disturbed land	0	0.01/disturbed land
Visitor Center	1.0/birch-aspen	0.9/birch-aspen	0.3/birch-aspen
Bubble Pond	0.3/spruce-fir	0.3/spruce-fir	0
Wildwood Stables	8.0/open field and disturbed land	0.1/open field and disturbed land	0.1/open field and disturbed land
Park Headquarters	0.5/disturbed land	0.5/disturbed land	0
Brown Mountain Gatehouse	0.3/disturbed land	0	0
Bikeway: Eagle Lake-Sieur de Monts	3.8/birch-aspen 0.6/northern hardwood 0.6/white pine 0.2/red oak 0.2/open field	0	0
Bikeway: Mount Desert Island High School – Eagle Lake	1.9/birch-aspen 0.2/red oak 0.2/mixed conifer 0.1/spruce-fir 0.2/rock 0.2/disturbed land	0	0

Table 6: Land Disturbance, Alternatives 1-3

	Alternative 1: Dispersed Use	**Alternative 2: Managed Use**	**Alternative 3: Minimum Requirements**
Bikeway: Schooner Head Road	2.8/birch-aspen 0.6/red oak 0.2/disturbed land 0.05/white pine	0	0
TOTALS	9.7/disturbed land and open field 9.5/birch-aspen 1.0/red oak 0.7/white pine 0.6/northern hardwood 0.5/hemlock 0.4/spruce-fir 0.2/mixed conifer 0.2/rock	.09/birch-aspen .61/disturbed land and open field .305/spruce-fir .2/hemlock	0.3/birch-aspen 0.2/hemlock 0.2/disturbed land and open field
	22.8 acres	2.6 acres	0.7 acres

In addition, under alternatives 1 and 2 as much as 100 acres could be partially cleared and managed for vistas along carriage trails and the Park Loop Road.

APPENDIXES

APPENDIX A: LEGISLATION

II. NATIONAL PARKS

1. Acadia National Park

Page
Sieur de Monts National Monument established: Proclamation (No. 1339) of July 8, 1916 9

SIEUR DE MONTS NATIONAL MONUMENT,[1] MAINE

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

[No. 1339—July 8, 1916—39 Stat. 1785]

WHEREAS, the Hancock County Trustees of Public Reservations, State of Maine, did, on the 10th day of June, 1916, pursuant to the Act of Congress entitled, "An Act for the Preservation of American Antiquities", approved June 8, 1906, (34 Stat., 225), by their certain deed of conveyance, properly executed in writing and acknowledged, give, grant and convey to the United States of America the following described lands at that time held by them in private ownership and being located upon Mount Desert Island in the State of Maine, and bounded and particularly described as follows, to wit:

Beginning at a large hemlock tree in the west line of land of Charles C. Burrill, said tree marking the southwest corner of the Humphrey Stanwood Lot, so called; thence south six degrees thirty minutes west, but everywhere following the west line of said land of Burrill, one thousand three hundred and thirty-eight feet, more or less, to the southwest corner of said land of Burrill; thence on same course, south six degrees thirty minutes west, following the west line of land formerly of John B. and Charles T. How, now of George B. Dorr, four hundred and twelve and five-tenths feet to an iron bolt set in the ledge and a cross cut in the ledge on Kebo Mountain, said bolt marking the southwest corner of said land of Dorr; thence, following the south line of said land of Dorr, south eighty-three degrees thirty minutes east six hundred and forty-five feet to a cedar stake driven in the ground; thence south seven degrees five minutes east five hundred and ninety-eight feet to a cedar stake driven in the ground; thence south fifteen degrees east five hundred and ninety-two and five-tenths feet to a cedar stake driven in the ground; thence south two degrees thirty minutes east four hundred and forty feet; thence south ten degrees east four hundred and ninety-seven feet to a stake and stones; thence south twenty-four degrees thirty minutes east three hundred and fifty-seven feet to a stake driven in the ground; thence south five degrees thirty minutes west one hundred and ninety-four feet to a stake driven in the ground; thence south thirty minutes east six hundred and ninety-two feet to a stake driven in the ground; thence south fifty-two degrees forty-five minutes east to the west side line of the Kane Memorial Path, so-called; thence southerly, but always following the western side line of said Kane Memorial Path, to its intersection with the Ladder Path, so-called; thence southerly and easterly, but everywhere following the western and southern side lines of said Ladder Path, to an iron bolt driven in the ground at a point one rod westerly of the western side line of the Otter

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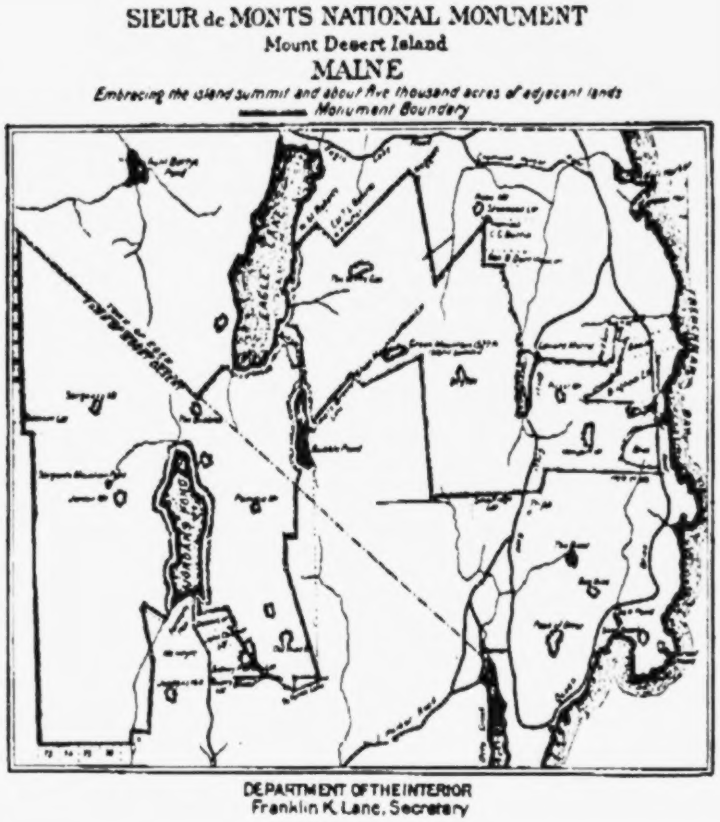
[1] Monument established as the Lafayette National Park by act of Feb. 26, 1919 (40 Stat. 1178). Subsequently changed to Acadia National Park by act of Jan. 19, 1929 (45 Stat. 1083). See Vol. I, page 21.

Creek Road; thence northerly, but everywhere parallel with and one rod distant from said Otter Creek Road, to the southern line of said Kane Memorial Path; thence at right angles easterly to the center of said Otter Creek Road; thence northerly, by said Otter Creek Road, to an iron bolt at the junction of line of land of Morrell and the eastern line of said Road; thence south thirty degrees thirty minutes east, but everywhere following said land of Morrell two hundred and fifty feet, more or less, to an iron pipe driven in the ground; thence south eighty degrees ten minutes east, but everywhere following the southerly line of said land of Morrell and land of Dorr two thousand five hundred and thirty-four and four-tenths feet, passing through an iron pipe driven in the ground marking the southwest corner of land of George B. Dorr, to a stake driven in the ground; thence north eighty-one degrees twenty minutes east, following said land of said Dorr, one hundred and fifty-six and seventy-five one-hundredths feet to a stake driven in the ground; thence north seventy-three degrees east, still following said land of Dorr, two hundred and eighty-seven and twenty-six one-hundredths feet to a stake driven in the ground; thence north nine degrees fifty-five minutes east, still following said land of Dorr, seven hundred and forty-four and ninety-seven one-hundredths feet to a stake driven in the ground; thence north fifteen degrees thirty minutes east, still following said land of Dorr, three hundred and twenty-five and five one-hundredths feet to a stake driven in the ground; thence north fifty-five minutes east, still following said land of Dorr, two hundred and fourteen and ninety-nine one-hundredths feet to the southern line of the Quarry Road, so-called; thence south sixty-five degrees twenty-three minutes east one hundred and ninety-nine and ninety-eight one-hundredths feet to a stake driven in the ground; thence south twenty-one degrees twenty minutes west, following land of said Dorr; four hundred and ninety-five feet to a stake driven in the ground; thence south eighty-seven degrees east, following said land of Dorr, three hundred and sixty and eight-five one-hundredths feet to a stone set in the ground marking the northwest corner of land of Bowler; thence south nineteen degrees fifteen minutes west, eight hundred and sixty-nine and eighty-eight one-hundredths feet to a stone set in the ground in the line between land of Bingham Estate and said Bowler; thence continuing same course, to wit, south nineteen degrees fifteen minutes west one hundred and eighty-one and seventeen one-hundredths feet to a pine tree marked for a corner; thence south seven degrees east, but everywhere following the western line of said Bingham land three hundred and eighty-seven and forty-two one hundredths feet, more or less, to the most northerly corner of that certain lot described as conveyed in the deed from Daniel W. Brewer to the Trustees of the Bingham Estate, dated October 23, 1882, and recorded in the Hancock County Maine Registry of Deeds in Book 185, Page 169; thence in a general southwesterly direction, but everywhere following the northwesterly line of said lot so described as conveyed in said deed from Brewer to Trustees of the Bingham Estate, to the northerly line of land formerly of Charles T. How, later of Brunnow; thence south eighty-three degrees east to a stake and stones marking the northwest corner of land of Brunnow, said stake and stones being six hundred and seventy-four feet north eighty-three degrees west from the Schooner Head Road; thence south thirty-three degrees thirty minutes west one hundred and two feet to a poplar tree; thence south sixty-eight degrees west one hundred and nineteen feet to a stake and stones; thence south seven degrees east three hundred and twenty-five feet to a stake and stones marking the southwest corner of said land of Brunnow; thence north eighty degrees forty-five minutes east, following the southern line of said land of Brunnow, eight hundred and sixty feet, more or less, to the Schooner Head Road; thence south five degrees west, but following said Schooner Head Road, six hundred and thirty-six and twenty-five one-hundredths feet, more or less, to the north line of land of Bliss; thence south seventy-three degrees twenty minutes west eight hundred and fifty-five and six-tenths feet to a piece of iron pipe driven in the ground; thence south sixty degrees west thirty-nine and six-tenths feet to a piece of iron pipe driven in the ground; thence south fifty degrees forty minutes west forty-two and nine-tenths feet to a piece of iron pipe driven in the ground; thence south forty-three degrees twenty-eight minutes west forty six and one-tenth feet to a piece of iron pipe driven in the ground; thence south thirty-nine degrees sixteen minutes west forty-four and two-tenths feet to a piece of iron pipe driven in the ground; thence south thirty-eight degrees ten minutes west forty-seven and eight-tenths feet to a piece of iron pipe driven in the ground; thence south thirty-six degrees fifty minutes west three hundred and thirty-two and six-tenths feet to a piece of iron pipe driven in the ground; thence south twenty-six degrees twenty-six minutes west one hundred and thirty-two and two-tenths feet to a piece of iron pipe driven in the ground; thence south twenty-five degrees twenty-four minutes west one hundred and nineteen and seven-tenths feet to a piece of iron pipe driven in the ground; thence south twenty-three degrees two minutes west fifty-five and eight-tenths feet to a piece of iron pipe driven in the ground; thence south fifteen degrees thirty minutes west sixty and eight-tenths feet to a piece of iron pipe driven in the ground; thence south twelve degrees twenty-six minutes west two hundred and seven and eight-tenths feet to a piece of iron pipe driven in the ground; thence south four degrees fourteen minutes west forty-three and four-tenths feet to a piece of iron pipe driven in the ground; thence south thirty-two minutes west forty and five-tenths feet to a piece of iron pipe driven in the ground; thence south twenty-three degrees eight mintues east thirty-four feet to a piece of iron pipe driven in the ground; thence south forty-seven degrees twenty-four minutes east thirty-nine and eight-tenths feet to a piece of iron pipe driven in the ground; thence south fifty-eight degrees twenty-four minutes east thirty-four and seven-tenths feet to a piece of iron pipe driven in the ground; thence south sixty-three degrees fifty-two minutes east three hundred and twenty-two and three-tenths feet to a piece of iron pipe driven in the ground; thence south seventy-three degrees forty minutes east one hundred and fifteen and nine-tenths feet to a piece of iron pipe driven in the ground; thence south eighty-four degrees four minutes east one hundred and five and seven-tenths feet to a piece of iron pipe driven in the ground; thence south seventy-six degrees thirty-four minutes east seventy-one and four-tenths feet to a piece of iron pipe driven in the ground; thence south sixty-one degrees twenty-six minutes east one hundred and seventy-one and two-tenths feet to a piece of iron pipe driven in the ground; thence north eighty-six degrees ten minutes east sixty-five and one-tenth feet to a piece of iron pipe driven in the ground; thence north seventy degrees twenty-four minutes east eighty-two and nine-tenths feet to a piece of iron pipe driven in the ground; thence north eighty-one degrees twenty minutes east seventy-eight and seven-tenths feet to a piece of iron pipe driven in the ground; thence south seventy-six degrees ten minutes east one hundred and thirty-one and five-tenths feet to a piece of iron pipe driven in the ground; thence south sixty-two degrees forty-five minutes east one hundred and eighty-three and seven-tenths feet to a piece of iron pipe driven in the ground; thence south sixty-nine degrees fifty-eight minutes east fifty-two and eight-tenths feet to a piece of iron pipe driven in the ground; thence north forty-four degrees forty-five minutes east thirty-nine and three-tenths feet to a piece of iron pipe driven in the ground on the west side of the Schooner Head Road; thence following the west side of said road southerly to a stone post set in the ground in the north line of land of Hale et als; thence north eighty-four degrees west four thousand seven hundred and fifty feet to a stake and stones; thence southerly nine hundred and ten feet to a point north eighty-eight degrees east from a stake driven in the ground in the east side of the Otter Creek Road, marking the northeast corner of the Timothy Smallidge Lot, so-called; thence south eighty-eight degrees west six hundred and ninety-seven and nine-tenths feet to said stake; thence continuing same course, to wit, south eighty-eight degrees west, following said Smallidge lot, to the southwest corner of the lot described as conveyed in the deed from Daniel W. Brewer to Fountain & Serenus H. Rodick, dated April 21, 1883, and recorded in said Registry of Deeds Book 187, page 510; thence north, following the west line of said land so conveyed by Brewer to Rodick, to the southeast corner of the Green Mountain House Lot, so-called, said corner being marked by a bolt set in the ledge near the edge of a steep bluff on the southerly slope of Green Mountain and also marked by a cross cut in the ledge; thence south sixty-seven degrees thirty minutes west two thousand five hundred and eighty-nine feet to an iron bolt set in the ledge on the westerly slope of the western ridge of said Mountain, also marked by a cross cut in the ledge; thence north forty-nine degrees thirty minutes west six hundred and sixty feet to an iron bolt set in the ledge and a cross cut in the ledge near said bolt, said point being in the Gilmore-Brewer division line, or Deane line, so-called; thence following said Gilmore-Brewer division line south forty-five degrees west to a point one hundred and fifty feet easterly of the eastern shore of Bubble Pond or Turtle Lake; thence northerly, but everywhere parallel with and one hundred and fifty feet distant from said eastern shore of Bubble Pond, or Turtle Lake, to a stake driven in the ground; thence south fifty-two degrees west to a point one hundred and fifty feet westerly from the western shore of said Pond; thence southerly, but everywhere parallel with and one hundred and fifty feet distant from the western shore of said Pond to a stake driven in the ground near the southern end of Bubble Pond; thence southwesterly to a point on the town line between the towns of Eden and Mount Desert, said point being seven hundred and fifty feet at right angles westerly from the eastern line of the Benjamin and Enoch Spurling lot, or Jordan Purchase, so-called; thence south four degrees west, parallel with and seven hundred and fifty feet distant from said eastern line of said Spurling Lot, or Jordan Purchase, two thousand one hundred and thirty feet; thence westerly, at right angles to said last described line four hundred and seventy-five feet; thence southerly, at right angles to said last described line twelve hundred feet; thence southeasterly to a copper bolt set in a ledge on the eastern slope of the Eastern Triad Mountain; thence south thirteen degrees fifty-five minutes east one thousand two hundred and sixty-six and thirty-seven one-hundredths feet to a copper bolt in a point of ledge; thence south forty-one degrees fifty minutes west one hundred and seventy-seven and thirty-seven one-hundredths feet to an iron bolt set in a ledge marking the northeast corner of the lot of J. & C. H. Clement; thence westerly, but everywhere following the northerly line of said Clement Lot, to the northwest corner thereof; thence southerly, but everywhere following the westerly line of said Clement Lot, to the



SIEUR de MONTS NATIONAL MONUMENT
Mount Desert Island
MAINE
Embracing the island summit and about five thousand acres of adjacent lands
Monument Boundary

DEPARTMENT OF THE INTERIOR
Franklin K. Lane, Secretary

northerly side of the road leading to Turtle Lake; thence southwesterly, but everywhere following the northern side line of said road, forty-five feet, more or less, to a stone post in the side of said road; thence north eighty-one degrees twenty-three minutes west, passing through two iron bolts set in a bowlder in line of land of Helen P. Dane, and everywhere following same, four hundred and seventy-five and seventy-five one-hundredths feet to a stone post set in the ground; thence north twenty-eight degrees forty-six minutes west, still following said Dane line, three hundred and forty-five and two-tenths feet to an iron bolt in a bowlder; thence north sixty-one degrees thirty-nine minutes west, everywhere following said Dane line, six hundred and thirty-five and eight-tenths feet to an iron bolt in a bowlder; thence south fifty-eight degrees fifty-eight minutes west, but everywhere following said Dane line, six hundred and forty-two and eight-tenths feet to a stone post set in the ground; thence north eighty-seven degrees forty-five minutes west, but everywhere following said Dane line, eight hundred and thirty-three feet, to a stone post set in the ground; thence north thirty-five degrees fifty-six minutes east, following the easterly line of the so-called Candage Quarry Lot, one hundred and fifty and one-tenth feet to a stone post set in the ground; thence north eleven degrees thirty-nine minutes east, but everywhere following the eastern line of said Quarry Lot, two hundred and forty-nine and one-tenth feet to a stone post marking the northeastern corner of said Quarry Lot, said stone post at said northeastern corner being distant ten hundred and eighty-seven feet, measuring south eighty-two degrees thirty minutes east, from the intersection of the southerly line of the Sidney P. Bracy Lot, called also the Candage Lot, with the center of the town road leading to Jordan's Pond; thence turning and running easterly, bounded northerly by said Bracy or Candage Lot, to the southeast corner of said Bracy or Candage Lot; thence generally northerly, bounded westerly by said Bracy or Candage Lot, the John Clement Lot and the Hannah A. Bracy (widow) Dower Lot, to the northeast corner of said Dower Lot; thence south seventy degrees west, but always following the northern line of said Dower Lot, one thousand three hundred and three and five-tenths feet to the south-east corner of land formerly of Charles T. How; thence north four degrees east, following said How's east line, seven hundred and forty-two feet, more or less, to a point one hundred and fifty feet distant from the southerly shore of Jordan Pond; thence easterly, northerly, westerly and southerly, but everywhere parallel with and one hundred and fifty feet distant from the short of said Jordan Pond, to a point one hundred and fifty feet from the intersection of the shore line of the water of said Pond with the westerly line of the strip of land two rods wide taken and condemned for a pipe line by the Seal Harbor Water Supply Company by its condemnation proceedings of December 22, 1896, and according to its plans and descriptions of that date filed in the Registry of Deeds for Hancock County; thence south twenty-five degrees fifty minutes west; but everywhere following the westerly line of said strip so taken and condemned for a pipe line to its intersection with the northerly line of the lot of land taken and condemned for dams, reservoirs and other necessary buildings for the said Water Company by its condemnation aforesaid, and according to its plans and descriptions filed as aforesaid; thence north fifty-two degrees forty minutes west, but everywhere following the northerly line of said lot taken and condemned for dams and other purposes above mentioned, to the stone post marking the northwestern corner of said lot; thence south seventeen degrees twenty minutes west, but everywhere following the westerly line of said lot, one hundred and six and forty-one hundredths feet to the stone post marking its southwestern corner; thence in a southerly direction to Station Eighteen plus Seventy-eight in the centre line of the old location of the water pipe line of the Seal Harbor Water Supply Company according to the condemnation aforesaid; thence southwesterly, but everywhere following the centre line of said old location, being the centre line of a strip two rods wide marked at its angles by stone posts in the outside lines of said strip twenty-one hundred and two feet, more or less, to Station Thirty-nine plus Eighty in said centre line of said old location; thence diverging from said pipe line location and running south six degrees forty-one minutes west one thousand four hundred and forty-three feet to the Hannah H. Bracy north line, called also the widow Jordan's Dower Lot; thence north eighty-six degrees forty-five minutes west, but everywhere following the northerly side line of said Dower Lot to its northwest corner; thence south ten degrees thirty minutes west, but everywhere following the westerly line of said Dower Lot, five hundred and ninety-four feet, more or less, to a stake in the northern line of the Shore or Settlers' Lots, it being also the southwestern corner of said Dower Lot; thence north eighty-five degrees forty-five minutes west, everywhere following the northern line of the said Settlers' Lots and the southern line of the Jordan Purchase, so called, three thousand nine hundred and forty-three and five-tenths feet, more or less, to the southwesterly corner of said Jordan Purchase at the northwesterly corner of Settler's Lot No. 73 on the old Peters Plan; thence north four degrees forty-five minutes east, but everywhere following the westerly line of said Jordan Purchase thirteen thousand two hundred and thirty-three feet, more or less, to an iron bolt marking the northwestern corner of said Jordan Purchase, being the southern line of the Southwest Valley, or Gilmore Lot, said westerly line of the Jordan Purchase being marked throughout its length by iron bolts; thence westerly, following the southern line of said Southwest Valley or Gilmore Lot, four hundred and twelve and five-tenths feet to the southwest corner thereof; thence northerly, by the head line of the shore lots, to said town line; thence south forty-five degrees east, following said town line; to the southwesterly corner of Lot No. 4, according to the survey and plan made by A. P. Goodell in October A. D. 1880, said plan being recorded in the Registry of Deeds for said Hancock County; thence northerly and easterly, but always following said Lot No. 4, to a point one hundred and fifty feet distant from the shore of Eagle Lake; thence easterly and northerly, but everywhere parallel with and one hundred and fifty feet distant from said shore of Eagle Lake to a point one hundred and fifty feet distant from the Bubble Pond Brook; thence easterly, but everywhere parallel with and one hundred and fifty feet distant from said Bubble Pond Brook to the road leading to Bubble Pond; thence by said road, by the four next following courses and distances, first, south eight degrees five minutes east two hundred and two and twelve one-hundredths feet; thence south eleven degrees forty minutes east ninety-nine and ninety-nine one-hundredths feet; thence south twenty-five degrees twenty minutes east one hundred and forty-nine and ninety-eight one-hundredths feet; thence south thirteen degrees thirty-six minutes east two hundred and eighty-three and eight-tenths feet to a stake driven in the ground; thence diverging from said road and crossing said brook north eighty-nine degrees forty minutes east three hundred and thirty-nine and nine-tenths feet; thence north eight degrees thirty-five minutes west one hundred and fifteen and five-tenths feet; thence north eight degrees twenty minutes west one hundred and twenty-five and four-tenths feet; thence north one degree fifteen minutes west one hundred and thirteen and thirty-five one-hundredths feet; thence north ten degrees thirty minutes west one hundred and thirty-two feet; thence north six degrees fifty minutes east one hundred and sixty-eight and ninety-six one-hundredths feet; thence north fourteen degrees east one hundred and eighty-two and forty-nine one-hundredths feet; thence north fourteen degrees west one hundred and thirty-eight and ninety-three one-hundredths feet; thence north nine degrees west three hundred and fifty-one and ninety-one one-hundredths feet; thence south seventy-four degrees thirty minutes west to a point one hundred and fifty feet distant from the shore of Eagle Lake; thence northerly, but everywhere parallel with and one hundred and fifty feet distant from said shore of Eagle Lake to the southeastern line of land of W. M. Roberts; thence north fifty-two degrees thirty minutes east, but everywhere following the southeasterly line of said land of Roberts one thousand two hundred and seventy and five-tenths feet, more or less, to an iron bolt at a corner of land of the Estate of T. L. Roberts;

thence south thirty-seven degrees thirty minutes east, but everywhere following the southwest line of said Roberts Estate and land now or formerly of William H. Puffer one thousand one hundred and fifty-five feet, more or less, to a stone post at the southwest corner of said land of Puffer, thence north fifty-two degrees thirty minutes east, but always following the southeasterly line of land now or formerly of Puffer et als, being lot No. 56 on said Peters Plan, to the Thomas Wasgatt Lot, so called; thence south thirty-seven degrees thirty minutes east, following said Wasgatt Lot, to land formerly of the Heirs of Benjamin Ash, now of the Rodick Realty Company; thence south two degrees thirty minutes west, but always following said land of the Rodick Realty Company five thousand seven hundred and thirty-five feet to said Brewer-Gilmore Division Line, or Deane Line; thence north forty-five degrees east, always following said land of Rodick Realty Company, et als, three thousand eight hundred and fifty-two and seventy-five one-hundredths feet, more or less, to the hemlock tree, the place of beginning, and

WHEREAS, the said conveyance has been accepted by the Secretary of the Interior in the manner and for the purposes prescribed in said act of Congress, and

WHEREAS, the said lands embrace about five thousand acres adjacent to and including the summit of Mount Desert Island, which island was discovered by Samuel de Champlain and upon which he first landed when, acting under the authority of Sieur de Monts, he explored and described the present New England coast, an exploration and discovery of great historic interest. The topographic configuration, the geology, the fauna and the flora of the island, largely embraced within the limits of the Monument, also, are of great scientific interest,

NOW, THEREFORE, I, Woodrow Wilson, President of the United States of America, by virtue of the power and authority in me vested by Section 2 of said Act of Congress, do hereby declare and proclaim that the said lands hereinbefore described and which are located within the irregular tract and fully delineated on the diagram hereto attached and made a part hereof, are hereby reserved and set apart as a National Monument, to be known and recognized as the Sieur de Monts National Monument.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy or remove any of the features or objects included within the boundaries of this Monument and not to locate or settle upon any of the lands thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington, this 8th day of July in the year of
our Lord one thousand nine hundred and sixteen, and of the
[SEAL] Independence of the United States the one hundred and forty-first.

WOODROW WILSON.

By the President:
FRANK L. POLK,
Acting Secretary of State.

16. Acadia National Park

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Act of February 26, 1919, establishing the Lafayette National Park 215

Act of January 19, 1929, providing for extension of boundary limits of Lafayette National Park in Maine and for change of name of said park to the Acadia National Park 215

Act of May 23, 1930, authorizing transfer of former naval radio station, Seawall, Maine, as an addition to Acadia National Park 216

An Act To establish the Lafayette National Park in the State of Maine, approved February 26, 1919 (40 Stat. 1178)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the tracts of land, easements, and other real estate heretofore known as the Sieur de Monts National Monument, situated on Mount Desert Island, in the county of Hancock and State of Maine, established and designated as a national monument under the Act of June eighth, nineteen hundred and six, entitled "An Act for the preservation of American antiquities," by presidential proclamation of July eighth, nineteen hundred and sixteen, is hereby declared to be a national park and dedicated as a public park for the benefit and enjoyment of the people under the name of the Lafayette National Park, under which name the aforesaid national park shall be entitled to receive and to use all moneys heretofore or hereafter appropriated for Sieur de Monts National Monument. (U.S.C., title 16, sec. 341.)

Lafayette National Park, Maine.
Sieur de Monts National Monument, changed to.

SEC. 2. That the administration, protection, and promotion of said Lafayette National Park shall be exercised under the direction of the Secretary of the Interior by the National Park Service, subject to the provision of the Act of August twenty-fifth, nineteen hundred and sixteen, entitled "An Act to establish a National Park Service, and for other purposes," and Acts additional thereto or amendatory thereof. (U.S.C., title 16, sec. 342.)

Administration by National Park Service.
Vol. 39, p. 535.
See p. 9.

SEC. 3. That the Secretary of the Interior is hereby authorized, in his discretion, to accept in behalf of the United States such other property on said Mount Desert Island, including lands, easements, buildings, and moneys, as may be donated for the extension or improvement of said park. (U.S.C., title 16, sec. 343.)

Acceptance of donated lands, etc.

An Act To provide for the extension of the boundary limits of the Lafayette National Park in the State of Maine and for change of name of said park to the Acadia National Park, approved January 19, 1929 (45 Stat. 1083)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress as-

Lafayette National Park, Maine.

Acceptance authorized of lands, etc., donated for extension thereof.

sembled, That the Secretary of the Interior be, and he is hereby, authorized, in his discretion, to accept in behalf of the United States lands, easements, and buildings, as may be donated for the extension of the Lafayette National Park, lying within the bounds of Hancock County within which the park is situated, together with such islands in Knox County adjoining, as lie to the east and south of the main ship channel through Penobscot Bay, which complete the archipelago of which Mount Desert Island, whereon the park is situated, forms the dominant and largest unit. (U.S.C., 6th supp., title 16, sec. 342a.)

Name changed to Acadia National Park.

Provisos. Water Power Act not applicable. Vol. 41, p. 1063.

SEC. 2. That the area now within the Lafayette National Park, together with such additions as may hereafter be made thereto, shall be known as the Acadia National Park, under which name the aforesaid national park shall be entitled to receive and to use all moneys heretofore or hereafter appropriated for the Lafayette National Park: *Provided*, That the provisions of the Act of June 10, 1920, entitled "An Act to create a Federal Power Commission, to provide for the improvement of navigation, the development of water power, the use of the public lands in relation thereto, and to repeal section 18 of the Rivers and Harbors Appropriation Act, approved August 8, 1917, and for other purposes," shall not apply to or extend to any lands now or hereafter included in said park. (U.S.C., 6th supp., title 16, sec. 342b.)

An Act To authorize the transfer of the former naval radio station, Seawall, Maine, as an addition to the Acadia National Park, approved May 23, 1930 (46 Stat. 377)

Acadia National Park, Maine.

Lands added to.

Vol. 40, p. 1178, amended. See p. 216.
Vol. 45, p. 1083. See p. 216.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Navy be, and he hereby is, authorized and directed to transfer to the control and jurisdiction of the Secretary of the Interior as an addition to the Acadia National Park, established under the Act of February 26, 1919 (40 Stat. 1178), as amended by the Act of January 19, 1929 (Public, Numbered 667, Seventieth Congress), all that tract of land containing two hundred and twenty-three acres, more or less, with improvements thereon, comprising the former naval radio station at Seawall, town of Southwest Harbor, Hancock County, Maine, said tract being no longer needed for naval purposes. (U.S.C., 6th supp., title 16, sec. 342a.)

II. LEGISLATION RELATING TO THE NATIONAL PARKS

1. Acadia National Park

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An Act To authorize the transfer of the Green Lake Fish Cultural Station in Hancock County, Maine, as an addition to Acadia National Park, approved May 29, 1935 (49 Stat. 312)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Commerce be, and he is hereby, authorized and directed to transfer to the control and jurisdiction of the Secretary of the Interior as an addition to the Acadia National Park, established under the Act of February 26, 1919 (40 Stat. 1178), and Acts supplemental thereto, all that tract of land containing eight hundred and twenty acres, more or less, with improvements thereon if any, comprising the abandoned Green Lake Fish Cultural Station, in Hancock County, Maine, said tract being no longer needed for fish-cultural purposes: *Provided,* That such action shall be in full recognition of any outstanding lease, license, or permit, affecting said land.

Green Lake Fish Cultural Station, Maine.

Transfer of, to Acadia National Park authorized. 40 Stat. 1178; 45 Stat. 1083.

Outstanding leases, permits, etc., recognized.

An Act To authorize the transfer of the Otter Cliffs Radio Station on Mount Desert Island in the State of Maine as an addition to the Acadia National Park, and for other purposes, approved August 24, 1935 (49 Stat. 795)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That upon the removal of the Otter Cliffs Radio Station and its relocation on lands within the Acadia National Park as authorized by the Act of April 22, 1932 (47 Stat. 91), the Secretary of the Navy be, and he is hereby, authorized and directed to transfer to the control and jurisdiction of the Secretary of the Interior as an addition to the Acadia National Park all that tract of land containing approximately twelve acres on Mount Desert Island in the State of Maine now occupied by and used by the Navy Department for the purposes of the said Otter Cliffs Radio Station, and the Secretary of the Interior shall be, and he is hereby, authorized and directed to transfer to the control and jurisdiction of the Secretary of the Navy for naval radio purposes the site of the relocated radio station, with the buildings and improvements thereon, and such surrounding area

Otter Cliffs Radio Station, Mount Desert Island, Maine.

Transfer of, as addition to Acadia National Park. 47 Stat. 126.

Jurisdiction.

Approval of design of buildings, etc.

as may be agreed upon by the Secretary of the Interior and the Secretary of the Navy: *Provided,* That the Secretary of the Interior shall retain the right to approve the design of the buildings and structures to be placed thereon including any additions or alterations to the present radio station.

Bridge across the inlet to the Black Woods, authorized.

SEC. 2. That the Secretary of the Interior be, and he is hereby, authorized to construct or cause to be constructed in connection with and as a part of the road system of the Acadia National Park, a bridge or causeway and approaches thereto across the inlet or bay lying between the Otter Cliffs and the Black Woods, in the State of Maine, at a point which he may designate as most suitable to the interests of the Federal Government.

Excerpt from "An Act To authorize the disposition of recreational demonstration projects, and for other purposes," approved June 5, 1942 (56 Stat. 327)

Addition of designated projects to other areas.

SEC. 2. From and after the date of this Act, the lands acquired for the Acadia, French Creek, Shenandoah, and White Sands recreational demonstration projects shall be added to and become a part of Acadia National Park, Hopewell Village National Historic Site, Shenandoah National Park, and White Sands National Monument, in the order named above, subject to all laws, rules, and regulations applicable to the respective areas to which such recreational demonstration projects are added: *Provided,* That within six months after the date of this Act the Secretary of the Interior shall file with The National Archives a map of each recreational demonstration project enumerated in this section. (16 U.S.C. sec. 459s.)

Proviso.

II. LEGISLATION RELATING TO NATIONAL PARKS

1. Acadia National Park

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Conveyance, for school purposes, of certain land in park to town of Tremont, Maine, authorized — Act of August 1, 1950 — 92
Exclusion of Green Lake Fish Hatchery Tract from park and its disposal as surplus Federal property authorized — Act of July 24, 1956 — 92

An Act Providing for the transfer of certain property from the Home Owners' Loan Corporation to the United States for national-park purposes, approved December 22, 1944 (58 Stat. 914)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Home Owners' Loan Corporation (herein called the "Corporation") is authorized and directed to convey and transfer to the United States of America, upon the terms and conditions provided in section 4 hereof, all right, title, and interest vested in the Corporation, at the date of such conveyance and transfer, in and to real property and interests therein in the county of Hancock, State of Maine, acquired by the Corporation through the foreclosure of that certain mortgage deed, dated October 20, 1933, executed to the Corporation by Percy B. Russell and Florence L. Russell, and appearing in book 642, page 389, of the Registry of Deeds of Hancock County, State of Maine.

HOLC. Conveyance of certain property in Hancock County, Maine.

SEC. 2. The Secretary of the Interior, for and on behalf of the United States of America, is authorized and directed to accept the conveyance and transfer of such property without regard to the provisions of section 355, as amended, section 1136, as amended, and section 3709 of the Revised Statutes (except the last paragraph of said section 355, as amended, which shall be applicable hereto), or any other provision of law. The Secretary of the Interior is further authorized and directed to pay all necessary fees, charges, and expenses in connection with such conveyance and transfer.

Acceptance on behalf of U.S.

40 U.S.C. § 255; 10 U.S.C. § 1339; 41 U.S.C. § 5.

SEC. 3. Upon the conveyance and transfer of such property as herein provided, it shall be used and administered by the Secretary of the Interior solely for

Property to become part of Acadia National Park.

national-park purposes, and it shall be deemed to constitute a part of the Acadia National Park.

Cancellation of HOLC bonds.

12 U.S.C. § 1463; Supp. III, § 1463.

Adjustments on books and records.

SEC. 4. Any other provision of law to the contrary notwithstanding, the Secretary of the Treasury shall, upon such conveyance and transfer and in lieu of any other payment by the United States to the Corporation as consideration for the conveyance and transfer of such property, cancel bonds of the Corporation, in the principal sum of $18,000, purchased by the Secretary of the Treasury under or by reason of the provisions set forth in section 4 of the Home Owners' Loan Act of 1933, approved June 13, 1933 (48 Stat. 128), as amended (which bonds are hereby made available to the Secretary of the Treasury for the purposes of this section), and all sums due and unpaid upon or in connection with such bonds at the time of such cancellation and discharge, together with any accrued interest: *Provided*, That the Secretary of the Treasury and the Corporation are authorized and directed to make adjustments on their books and records as may be necessary to carry out the purposes of this Act. (16 U.S.C. § 343b.)

An Act To transfer jurisdiction of certain lands comprising a portion of Acadia National Park, Maine, from the Department of the Interior to the Department of the Navy, and for other purposes, approved July 30, 1947 (61 Stat. 519)

Acadia National Park, Maine. Transfer of jurisdiction.

Approval of design of buildings, etc.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That control and jurisdiction over the following-described lands now comprising a portion of the Acadia National Park, in the State of Maine, are hereby transferred from the Department of the Interior to the Department of the Navy: *Provided*, That the Secretary of the Interior shall retain the right to approve the design of the buildings and structures to be placed thereon.

All that certain tract or parcel of land on Big Moose Island, Winter Harbor, Maine, which is bounded southerly and easterly by a chain link security fence, and northerly and westerly by the waters of Pond Island Cove and Frenchman Bay, and which is more particularly described as beginning at a point on the shore at the high-water mark of Frenchman Bay on the southwesterly side of Big Moose Island, so called, thence following the chain link security fence as now erected by the three following courses and distances: North no degrees five minutes west one hundred and fifty-three feet; thence north thirty degrees twenty-four minutes east one hundred and fifty-seven and seven-tenths feet; thence south eighty-nine degrees nine minutes east one thousand four hundred and fifty-five and three-tenths feet to a point and angle in the said security fence which bears north thirty-four degrees fifty-four minutes west and is fifty feet distant at right angles from a point in the center line of the National Park Service road known as the Big Moose Island Road; thence turning to the left and following the said security fence in a general northerly direction but everywhere parallel with and fifty feet distant from the center line of the said Big Moose Island Road three thousand five hundred feet more or less to the high-water mark on the shore of Pond Island Cove; thence in a generally westerly and southerly direction but everywhere following the high-water mark of Pond Island Cove and Frenchman Bay seven thousand four hundred and seventy feet more or less to the place of beginning; except that portion thereof, containing twenty-five and ninety-six one-hundredths acres, which was transferred to the jurisdiction of the Department of the Navy pursuant to the Act of August 24, 1935 (ch. 644, 49 Stat. 795); the lands herein described containing one hundred and fifty-one and eighty-six one-hundredths acres after excluding the excepted portion.

Retransfer of jurisdiction.

SEC. 2. The Secretary of the Navy is authorized and directed to retransfer jurisdiction over the property described in section 1 of this Act to the Secretary of the Interior in the event such property hereafter becomes surplus to the needs of the Department of the Navy, in which event it again shall become a part of Acadia National Park. (16 U.S.C. § 342 note.)

An Act Relating to the exchange of certain private and Federal properties within the authorized boundaries of Acadia National Park, in the State of Maine, and for other purposes, approved September 7, 1949 (63 Stat. 691)

Acadia National Park, Maine. Exchange of lands.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of consolidating Federal holdings of land within Acadia National Park, the Secretary of the Interior is hereby authorized to accept, on behalf of the United States, approximately fifty-eight acres of non-Federal land within the authorized park boundaries, such land to be conveyed to the United States without cost by Mr. John D. Rockefeller, Junior. Upon acceptance of title thereto by the United States, such property shall be subject to all laws and regulations applicable to the park. In exchange for the conveyance to the United States of the aforesaid property, the Secretary of the Interior is authorized to convey to Mr. John D. Rockefeller, Junior, or to such agency as he may designate, for purposes of the Jackson Memorial Laboratory, Bar Harbor, Maine, approximately five acres of federally owned land within the park adjacent to the laboratory properties. (16 U.S.C. § 343c.)

II. NATIONAL PARKS—ACADIA

An Act To authorize the conveyance, for school purposes, of certain land in Acadia National Park to the town of Tremont, Maine, and for other purposes, approved August 1, 1950 (64 Stat. 383)

Tremont, Maine. Conveyance.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior, in his discretion, is hereby authorized to convey without consideration, but under such terms and conditions as he may deem advisable, to the town of Tremont, Hancock County, Maine, for school purposes, eight and forty-five one-hundredths acres of land, more or less, situate between Marsh Creek and Marsh Road on Mount Desert Island, Hancock County, Maine, now a part of Acadia National Park.

An Act To exclude certain lands from Acadia National Park, Maine, and to authorize their disposal as surplus Federal property, approved July 24, 1956 (70 Stat. 597)

Acadia National Park, Maine.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the tract of land in Acadia National Park, State of Maine, comprising approximately three hundred acres and identified as the "Green Lake Fish Hatchery Tract" is hereby excluded from Acadia National Park, and the said tract is authorized to be disposed of in accordance with the laws relating to the disposition of Federal property. (16 U.S.C. § 343d.)

Ninety-seventh Congress of the United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Monday, the twenty-fifth day of January, one thousand nine hundred and eighty-two

An Act

Relating to the establishment of a permanent boundary for that portion of the Acadia National Park as lies within the town of Isle au Haut, Maine.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Congress finds that—

(1) there are significant scenic, educational, natural, and cultural resources in the town of Isle au Haut, Maine;

(2) due to the isolated location and traditional resource-based economy of the town's island community, these resources are fragile and deserving of conservation and protection through both public and private efforts; and

(3) both residents of the town and visitors to the Acadia National Park will benefit from the establishment of a permanent boundary for the park and the management of parklands on a limited entry, low intensity basis.

Sec. 2. Notwithstanding any other provision of law, the permanent boundary of Acadia National Park lying within the town of Isle au Haut, Maine, is hereby established to include only those lands and interests therein as are depicted on the map entitled "Boundary Map, Acadia National Park, Town of Isle au Haut, Maine", numbered 123-80003 and dated October 1981, which map is on file and available for public inspection in the offices of the Department of the Interior and at the Registry of Deeds for Hancock and Knox Counties, Maine.

Sec. 3. (a) Within the boundary established by section 2, and as indicated on the map referenced therein, the Secretary of the Interior (hereinafter referred to as "the Secretary") is authorized to acquire lands and interests therein by donation or exchange. The Secretary is authorized and directed to acquire by donation, purchase with donated or appropriated funds, or exchange the tract known as the Hamilton lot in Duck Harbor. No later than one hundred and eighty days from enactment hereof, the Secretary shall convey to the town of Isle au Haut all right, title and interest of the United States in and to those lands under the jurisdiction of the Secretary which lie outside the boundary established by section 2 and within the town of Isle au Haut, subject only to such covenants running with the land as the Secretary and the town agree are necessary to preserve the general character of such lands, which shall include covenants to maintain forever in their natural condition (excepting the cutting of fire trails and the extinguishment of fires) lands above three hundred feet above the mean high water level: *Provided, however,* That such covenants with respect to lands above three hundred feet and below four hundred feet shall permit the gathering and removal of dead and fallen timber.

(b) Notwithstanding any other provisions of this Act, the Secretary is also authorized to accept by donation, as a coholder for enforcement purposes only, a limited enforcement interest in con-

S. 1777—2

servation easements on lands outside the boundary established by section 2 hereof and within the town of Isle au Haut which may from time to time be donated to the Isle au Haut Land Conservation Trust, a trust established under the laws of the State of Maine. The Superintendent of Acadia National Park is hereby authorized to serve as an ex officio trustee of such trust.

SEC. 4. (a) The management and use of parklands on Isle au Haut shall not interfere with the maintenance of a viable local community with a traditional resource-based economy outside the boundary of the park. To the maximum extent practicable, no development or plan for the convenience of park visitors shall be undertaken which would be incompatible with the preservation of the flora and fauna or the physiographic conditions now prevailing, and every effort shall be exerted to maintain and preserve this portion of the park in as nearly its present state and condition as possible. In recognition of the special fragility and sensitivity of the park's resources, visitation shall be strictly limited to assure negligible adverse impact on such resources, to conserve the character of the town and to protect the quality of the visitor experience.

(b) In furtherance of the purpose of subsection (a) of this section, the Secretary shall prepare a report establishing carrying capacities for the Isle au Haut portion of Acadia National Park. The report shall be prepared and the carrying capacities established with public participation and in consultation with the town of Isle au Haut and other interested parties.

(c) The Secretary shall transmit the report to the Energy and Natural Resources Committee of the Senate and the Interior and Insular Affairs Committee of the House of Representatives no later than six months from the date of enactment of this Act. The Secretary shall begin implementing the carrying capacities contained in the report sixty days after the report has been transmitted to the committees.

(d) Carrying capacities established pursuant to this section shall be reviewed, and if necessary revised, every five years. Any revision in such carrying capacity shall be made in accordance with the procedures set forth in subsections (b) and (c) of this section.

(e) Until such time as a carrying capacity limitation is established and implemented pursuant to subsections (b) and (c) of this section, the Secretary shall take such temporary measures as are necessary to assure that visitation does not exceed the average annual visitation for the period 1979 to 1981.

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Sec. 5. There are hereby authorized to be appropriated after October 1, 1982, such sums as may be necessary to carry out the provisions of this Act.

Speaker of the House of Representatives.

Vice President of the United States and
President of the Senate.

Public Law 99-420
99th Congress

An Act

To establish a permanent boundary for the Acadia National Park in the State of Maine, and for other purposes.

Sept. 25, 1986
[S. 720]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I

SEC. 101. BOUNDARIES OF ACADIA NATIONAL PARK.

Conservation.
Public information.
16 USC 341 note.

In order to protect and conserve the land and water resources of Acadia National Park in the State of Maine (hereinafter in this title referred to as "the Park"), and to facilitate the administration of the Park, the boundary depicted on the map entitled "Acadia National Park Boundary Map", numbered 123-80011, and dated May 1986 (hereinafter in this title referred to as "the map") is hereby established as the permanent boundary for the Park. The map shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior, and it shall be made available to the Registry of Deeds for Hancock and Knox Counties, Maine.

SEC. 102. LANDS WITHIN BOUNDARIES.

Gifts and property.
16 USC 341 note.

(a) The Secretary of the Interior (hereinafter in this title referred to as "the Secretary") is authorized to acquire lands and interests therein within the boundaries of the Park by donation, exchange (in accordance with this section), or purchase with donated or appropriated funds, except that—

(1) any lands or interests therein owned by the State of Maine or any political subdivision thereof may be acquired only by donation or exchange; and

(2) privately owned lands or interests therein may be acquired only with the consent of the owner thereof unless the Secretary determines that the property is being developed or proposed to be developed in a manner which is detrimental to the scenic, historical, cultural, and other values for which the Park was established.

(b)(1) Not later than 6 months after the enactment of this Act, the Secretary shall publish specific guidelines under which determinations shall be made under subsection (a)(2). The Secretary shall provide adequate opportunity for public comment on such guidelines. The guidelines shall provide for notice to the Secretary prior to commencement of any proposed development within the boundaries of the Park. The Secretary shall provide written notice to the owner of the property of any determination proposed to be made under subsection (a)(2) and shall provide the owner a reasonable opportunity to comment on such proposal.

(2) For purposes of this section, except as provided in paragraph (3), development or proposed development of private property within

the boundaries of the Park that is significantly different from, or a significant expansion of, development existing as of November 1, 1985, shall be considered by the Secretary as detrimental to the values for which the Park was established.

(3) Reconstruction or expansion of a private or commercial building shall not be treated as detrimental to the Park or as an incompatible development within the meaning of this section if such reconstruction or expansion is limited to one or more of the following:

(A) Reconstruction of an existing building.

(B) Construction of attached or accessory structural additions, which do not exceed 25 per centum of the square footage of the principal structure.

(C) Construction of reasonable support development such as roads, parking facilities, water and sewage systems, and dock facilities.

Real property

(c)(1) The owners of any private property within the Park may, on the date of its acquisition by the Secretary and as a condition of such acquisition, retain for himself and his successors or assigns a right to use and occupancy for a definite term of not more than 25 years, or ending at the death of the owner, or his spouse, whichever is later. The owners shall elect the term to be reserved. The Secretary shall pay to the owner the fair market value of the property on the date of such acquisition, less the fair market value, of the right retained by the owner.

(2) Any such right retained pursuant to this subsection shall be subject to such terms and conditions as the Secretary may prescribe and may be terminated by the Secretary upon his determination and after reasonable notice to the owner thereof that such property is being used for any purpose which is incompatible with the administration of the Park or with the preservation of the resources therein. Such right shall terminate by operation of law upon notification to the owner by the Secretary and tendering to the owner the amount equal to the fair market value of that portion which remains unexpired.

(d)(1) In exercising his authority to acquire lands by exchange pursuant to this title, the Secretary may accept title to non-Federal property located within the the boundary of the Park and may convey to the grantor of such property any federally owned property under the jurisdiction of the Secretary which lies outside said boundary and depicted on the map. Properties so exchanged shall be approximately equal in value, as determined by the Secretary, except that the Secretary may accept cash from or pay cash to the grantor in such an exchange in order to equalize the value of the properties exchanged.

(2) Federally owned property under jurisdiction of the Secretary referred to in paragraph (1) of this subsection which is not exchanged within 10 years after enactment of this Act, shall be conveyed to the towns in which the property is located without emcumbrance and without monetary consideration, except that no town shall be eligible to receive such lands unless, within 10 years after enactment of this Act, lands within the Park boundary and owned by the town have been acquired by the Secretary.

(e) Notwithstanding any other provision of this section, lands depicted on the map referenced in section 101 and identified as 10DBH and 11DBH known as the "Bar Harbor Sewage Treatment Plant"; 14DBH known as the "New Park Street Ballfield"; and

15DBH known as the "Former Park Headquarters"; shall be conveyed by the Secretary, without monetary consideration, to the town of Bar Harbor, Maine, within 180 days following the enactment of this Act. The real property conveyed pursuant to this subsection shall be used and retained by the town for municipal and public purposes. Title to the properties conveyed pursuant to this subsection shall revert to the United States if such property or any portion thereof is conveyed by the town to another party or used for purposes other than those specified in this subsection.

(f) Notwithstanding any other provision of this section, land depicted on the map identified as 4DBH, located in the village of Town Hill, Maine, shall be conveyed by the Secretary without monetary consideration, to the town of Bar Harbor, Maine, as soon as practicable following the enactment of this Act, subject to such terms and conditions, including appropriate reversionary provisions, as will in the judgment of the Secretary provide for the development and use of such property by any town which so desires as a solid waste transfer station in accordance with a plan that is satisfactory to the town and the Secretary. The Secretary shall (subject to the availability of prior appropriations) contribute toward the cost of constructing such transfer station the lesser of—

(1) $350,000, or

(2) 50 per centum of the cost of such construction.

(g) Notwithstanding any other provision of this section, the Secretary is authorized to acquire by donation or exchange lands or interests therein in the area identified on the map as "Schooner Head", which is outside the boundary of the park. The Secretary is further authorized to acquire conservation easements on such lands by purchase with donated or appropriated funds if he determines after written notice to the owner and after providing a reasonable opportunity to comment on such notice, that the property is being developed or proposed to be developed in a manner which is significantly different from or a significant expansion of development existing as of November 1, 1985, as defined in subsection (b) of this section.

Conservation

(h)(1) The Secretary is authorized to acquire conservation easements by purchase from a willing seller or by donation on parcels of land adjacent to the Park on Schoodic Peninsula, the islands of Hancock County, and the islands of Knox County east and south of the Penobscot Ship Channel, except such islands as lie within the town of Isle au Haut, Knox County. Parcels subject to conservation easements acquired or accepted by the Secretary under this subsection must possess one or more of the following characteristics:

(A) important scenic, ecological, historic, archeological, or cultural resources;

(B) shorefront property; or

(C) largely undeveloped entire islands.

(2) Conservation easements acquired pursuant to this subsection shall—

(A) protect the respective scenic, ecological, historic, archeological, or cultural resources existing on the parcels;

(B) preserve, through setback requirements or other appropriate restrictions, the open, natural, or traditional appearance of the shorefront when viewed from the water or from other public viewpoints; or

(C) limit year-round and seasonal residential and commercial development to activities consistent with the preservation of the islands' natural qualities and to traditional resource-based land use including, but not limited to, fishing, farming, silviculture, and grazing.

(3) In determining whether to accept or acquire conservation easements pursuant to this subsection, the Secretary shall consider the following factors:

(A) the resource protection benefits that would be provided by the conservation easement;

(B) the public benefit that would be provided by the conservation easement;

(C) the significance of the easement in relation to the land planning objectives of local government and regional and State agencies;

(D) the economic impact of the conservation easement on local livelihoods, activities, and government revenues; and

(E) the proximity of the parcel to the boundary of the Park and to other parcels on which the Secretary maintains conservation easements.

(4) For purposes of this subsection, the term "conservation easement" means a less-than-fee interest in land or a conservation restriction as defined in section 476 through 479-B inclusive, as amended, of title 33 of the Maine Revised Statutes of 1964, as in effect on the date of the enactment of this Act.

(5) No easement may be acquired by the Secretary under this subsection without first consulting with, and providing written notification to, the town in which the land is located and the Acadia National Park Advisory Commission established by section 103 of this title. In providing such notification, the Secretary shall indicate the manner and degree to which the easement meets the criteria provided in this subsection.

(i) Nothing in this section shall be construed to prohibit the use of condemnation as a means of acquiring a clear and marketable title, free of any and all encumbrances.

(j)(1) Notwithstanding any other provision of this section, the Secretary shall accept an offer of the following from the Jackson Laboratory (a not-for-profit corporation organized under the laws of Maine):

(A) Lands depicted on the map as 55 A ABH which are held in fee by the Jackson Laboratory.

(B) A conservation easement on lands depicted on the map identified as 55 ABH (the developed property known as "Highseas"). The easement shall prohibit subdivision of such land or any further significant development on such lands, except as permitted by the guidelines published under section 102(b)(1).

(2) Upon receipt of the lands and easement described in paragraph (1), the Secretary shall transfer to the Jackson Laboratory the lands depicted on the map as 8 DBH and 9 DBH. Any disparity in the fair market value of the lands and easement referred to in paragraph (1) and the lands described in the preceding sentence shall be equalized as provided in section 102(d)(1).

(k) For purposes of subsection (a)(2), the construction of one single family residence on Burnt Porcupine Island by the owner of the Island shall not be treated as detrimental to the scenic, historic, cultural, or other values for which the park was established if, before such construction commences, the Secretary has reviewed and approved plans for the size, location and architectural design of the structure.

SEC. 103. ADVISORY COMMISSION.

16 USC 341 note

(a) There is hereby established an Acadia National Park Advisory Commission (hereinafter referred to as "the Commission"). The Commission shall be composed of 16 members appointed by the Secretary as follows:

(1) 3 members at large.

(2) 3 members appointed from among individuals recommended by the Governor of Maine.

(3) 4 members, appointed from among individuals recommended by each of the four towns on the island of Mount Desert.

(4) 3 members appointed from among individuals recommended by each of the three Hancock County mainland communities of Gouldsboro, Winter Harbor, and Trenton.

(5) 3 members, appointed from among individuals recommended by each of the three island towns of Cranberry Isles, Swans Island, and Frenchboro.

(b) The terms of the Commission members shall be 3 years except that, for initial appointments under each paragraph, one member shall serve for a term of one year, and one member shall serve for a term of 2 years.

(c) The Commission shall elect its own chairman and adopt its own bylaws. Any vacancy on the Commission shall be filled in the same manner in which the original appointment was made.

(d) Members of the Commission shall serve without compensation as such, except that the Secretary is authorized to pay the expenses reasonably incurred by the Commission in carrying out its responsibilities under this title.

(e) The Secretary shall consult with the Commission on matters relating to the management and development of the Park, including but not limited to each of the following:

(1) The acquisition of lands and interests in lands (including conservation easements on islands).

(2) Termination of rights of use and occupancy.

(f) The Commission established under this section shall terminate 20 years after the enactment of this Act.

SEC. 104. BEAR ISLAND.

16 USC 341 note

(a) Notwithstanding any other provision of law, Federal property located on Bear Island in the town of Cranberry Isle shall, with the concurrence of the agency having custody thereof, be transferred without consideration to the administrative jurisdiction of the Secretary for use by him in carrying out the provisions of the title. Such Federal property shall not be developed by the Secretary in a manner which would provide for or encourage intensive visitor use.

(b) The Secretary is authorized to make improvements to the Federal property on Bear Island as he deems appropriate for the protection of adjacent private property.

SEC. 105. TOWN OF ISLE AU HAUT.

16 USC 341 note.

The provisions of this title shall not apply to those portions of the Park lying within the Town of Isle au Haut, Maine, which lands shall continue to be governed by the provisions of Public Law 97-335.

16 USC 341 note.

16 USC 341 note.
Effective date.

SEC. 106. AUTHORIZATION OF APPROPRIATIONS.

(a) Effective October 1, 1986, there are authorized to be appropriated such sums as may be necessary to carry out the provisions of this title, but not to exceed $9,100,000 for acquisition of lands and interests therein.

(b) For the purposes of paragraph 7(a)(3) of the Land and Water Conservation Fund Act of 1965 as amended (16 U.S.C. 460l-9), the statutory ceiling provided in subsection (a) shall be deemed to have been enacted prior to the convening of the Ninety-fifth Congress.

16 USC 341 note.

SEC. 107. PAYMENTS TO LOCAL GOVERNMENTS.

31 USC 6904.

(a) Notwithstanding the limitation in subsection 3(d) of the Act of October 20, 1976 (90 Stat. 2662) payments in the manner provided in section 3 of that Act shall be made to the appropriate units of local government having jurisdiction over lands with the boundary of the Park. Such payments shall be made only for a period of 12 years.

(b) Payments received by the units of local government pursuant to this section shall be used only for fire protection, police protection, solid waste management, and road maintenance and improvement.

(c) Payments pursuant to this section may be made only from funds appropriated therefor. Such payments shall be in addition to and not in place of any other funds or form of Federal assistance to which the units of local government are entitled.

TITLE II

SEC. 201. CAPE COD NATIONAL SEASHORE ADVISORY COMMISSION.

16 USC 459b-7.

Section 8(a) of the Act of August 7, 1961 (Public Law 87-126; 75 Stat. 292) is amended by striking out "ten years" and substituting "30 years".

Approved September 25, 1986.

LEGISLATIVE HISTORY—S. 720:

HOUSE REPORTS: No. 99-572 (Comm. on Interior and Insular Affairs).
SENATE REPORTS: No. 99-198 (Comm. on Energy and Natural Resources).
CONGRESSIONAL RECORD:
Vol. 131 (1985): Dec. 3, considered and passed Senate.
Vol. 132 (1986): May 5, considered and passed House, amended.
June 6, Senate concurred in House amendment with amendments.
July 24, House concurred in certain Senate amendments, in another with an amendment.
Sept. 11, Senate receded from its amendment.

○

APPENDIX B: MANAGEMENT ZONES

The following section describes the zones and subzones proposed for Acadia National Park.

NATURAL ZONE

The natural zone includes lands and waters that would be managed to conserve natural resources and ecological processes and provide for their use and enjoyment by the public in ways that do not adversely affect these resources and processes.

Development in the natural zone would be limited to facilities that have no adverse effect on scenic quality and natural processes, that are essential for management, and that enhance appreciation of natural resources. Examples of typical facilities include trails and minor associated improvements, signs, and trailside information displays. There would be no picnic areas, toilet facilities, or campsites. This zone would be roadless, and public access would be restricted to foot traffic only. The primary use of this zone would be by the day use hiker.

The Park would attempt to maintain the components and processes of naturally evolving ecosystems, including the natural abundance, diversity, and ecological integrity of native plants and animals. Maintaining natural diversity is especially important. Species diversity contributes to visitors' aesthetic enjoyment of park wildlife, plants, and scenery; it is the basis of the park's scientific value as an outdoor laboratory; and it is critical to maintaining native gene pools and evolutionary processes. Therefore, those species and habitats identified as fragile, threatened, or otherwise significant (e.g., endangered species, Maine critical areas, wetlands, and other resources in the protected natural area) would receive high priority for monitoring and protection. This should not be construed to mean that common species and habitats would be neglected, for they too play an important role in maintaining biological diversity and maintaining ecological integrity.

Natural Environment

This subzone is comprised of the majority of park land and waters. Environmentally compatible recreational activities and interpretation would be accommodated in this subzone. Naturalness would be emphasized, but some human alterations or intrusions might be evident. The natural environment subzone would include outstanding geologic or ecologic features possessing unusual intrinsic value or uniqueness, such as shorelines and mountain summits, that would be managed to provide opportunities for public appreciation and interpretation.

Protected Natural Area

This subzone provides for the perpetuation of geological or ecological values with minimal, or no, human intrusion. These lands and waters would be set aside for strict protection because of fragility or ecological significance. Access by the public may be restricted.

CULTURAL ZONE

The cultural zone includes areas that would be managed for the preservation, protection and interpretation of cultural resources and their settings and to provide for their use and enjoyment by the public.

Cultural resources that are key to the purposes of the park would be included in this zone. In most cases, the boundary of the zone would be the boundary of a National Register of

Historic Places property. Where a property was eligible or potentially eligible for being listed on the national resister, the boundaries of the cultural zone would coincide with those of the eligible property pending nomination to the register. Cultural resources other than those key to the purposes of the park, including properties listed or eligible for listing on the national register, would be included in the zone that best reflected the primary management emphasis of their particular area of the park.

Development in the cultural zone must be compatible with preservation and interpretation of cultural values. Whenever possible, new construction would be avoided and every reasonable consideration would be given to using historic structures for park purposes compatible with their preservation and public appreciation. New structures, landscape features, and utilities would be constructed in the cultural zone only if (1) existing structures and improvements did not meet essential management needs, and (2) new construction was designed and sited to preserve the integrity and character of the area.

Preservation

In this subzone sites, structures, objects, and landscapes that are important because of their aesthetic value and/or their association with personages, events, or periods in human history would be managed for preservation and interpretation.

The fundamental question of which treatments would best provide for the preservation and public enjoyment of particular resources in the preservation subzone would be decided by site-specific planning. No treatment project would be undertaken unless supported by an approved proposal, plan, or report appropriate to the proposed action. The significance of the resource, its condition, its interpretive value, its research potential, and the availability of data would all be weighed in determining the appropriate treatment. Pending planning decisions, the park staff would strive to protect and preserve all resources in the preservation subzone in their existing conditions.

Preservation/Adaptive Use

In this subzone, significant historic structures may be used, with necessary modifications, for leasing or for contemporary public and/or administrative activities or functions that permit perpetuation of the qualities that make these resources qualify for listing on the National Register of Historic Places.

All uses of historic structures would be subject to preservation and public safety requirements. No administrative or public use would be permitted that would threaten the stability or character of a structure, the museum objects within it, or the safety of its users, or that would entail alterations significantly compromising its integrity. Any structural additions would harmonize with but be readily distinguishable from the older work and would not intrude upon the historic scene; other additions, such as security equipment, heating, and air conditioning, would meet the National Park Service requirements for rehabilitation.

DEVELOPED ZONE

The developed zone includes lands that would be managed to provide and maintain facilities serving park managers and visitors. It would include areas where park development or intensive use may substantially alter the natural environment or the setting for culturally significant resources. Impacts associated with such development would be mitigated to the greatest extent possible. There are no subzones.

The developed zone would encompass the facilities themselves and all associated lands directly modified as a result of their continuing management and use; the zone would be restricted to the smallest area necessary to accommodate required development and use. New development would be established only after considering alternative sites (including locations outside the park and locations outside areas with significant natural and cultural resources) and alternative levels of use, facilities, and services.

This zone would include land utilized to provide educational and interpretive services to visitors, such as the visitor center; to provide recreational opportunities to relatively large numbers of people, such as campgrounds; to provide noninterpretive/nonrecreational services to park visitors, such as a restaurant; to support administration and maintenance of park resources, including utilities and housing; and to provide for vehicular circulation within the park.

SPECIAL USE ZONE

The special use zone would encompass uses carried out by other government agencies or private interests on lands within the legislated boundary. National Park Service administrative control over the use of lands in this zone would be either lacking or secondary to that of another party.

Roads & Utilities

This subzone would include land managed primarily to provide transportation and utility services to areas outside the park. Examples include state and local road rights-of-way and pump houses for municipal water supplies.

Inholdings

Land and waters used for private purposes and identified for acquisition in the *Land Protection Plan* (NPS 1988) are included in this subzone. They would be acquired as specified in the 1986 boundary legislation.

APPENDIX C: PUBLIC COMMENTS

COMMENTS FROM MEETINGS AND WORKSHOPS

Eight sessions were held to discuss the alternatives being considered by the National Park Service planning team for the general management plan. All meetings were open to the public and 143 people attended. In addition, an information meeting was held with Acadia park staff and, at his request, the president of the Acadia Corporation. The superintendent of Acadia National Park was present at all meetings except the ones held in Ellsworth, Bangor, and Augusta. Notes of the meetings were taken for the planning team by Bruce Jacobson and Lauren McKean. Comments from those attending each meeting (except NPS personnel) are summarized below.

October 23, 1989: Town of Mount Desert Selectmen

The selectmen and town manager of Mount Desert were joined for the workshop by the public for a total attendance of 17. The meeting was held at the Mount Desert Town Office.

1. Explore the possibility of a Thompson Island fee station on park land.
    a. State legislation for a local-option tax or federal legislation for fee sharing are equally difficult to get passed.
    b. Fee to be shared with island towns.
    c. Provides management funds.
    d. Purpose of fee station would be to limit visitation.
    e. Sign instead of toll gate?
2. Do not develop park facilities on the "west side" of Mount Desert Island.
    a. Existing development is about right.
    b. No more vehicles on the west side. Don't want traffic to new picnic areas.
3. Don't "over market" existing or proposed facilities.
4. NPS needs to develop specifics regarding visitor management strategies referred to in GMP in order to limit impact of park visitors on Mount Desert Island.
    a. Traffic is a problem.
    b. Quality of life issues.
    c. Fees for use of town facilities.
    d. Park is "worn" now. How far can it go?
    e. Price to pay for not imposing limits is the destruction of the resource.
5. One option for controlling visitors would be to have a reservation system. It solved the problems in Otter Creek regarding Black Woods Campground.

6. Will business community benefit from people who have a quality experience in the park?
    a. Yes.
    b. Crowds and present merchandising in Bar Harbor is not a quality experience and people will not return there.
    c. Best type of tourist is the repeat who wants a quality experience. They are stewards with residents.
    d. Northeast Harbor business climate is different than Bar Harbor; quiet character.
7. Generally support cooperative stewardship alternative.
    a. Town of Mount Desert is not developing overnight accommodations.
        i. except for B&B's.
        ii. except for conversion of year-round residences to seasonal.
    b. Towns need to cooperate with the park for residents as well as for visitors.
8. Off-island accommodations are not addressed in the alternatives and people staying in Trenton, Ellsworth, and elsewhere will have impacts on Mount Desert Island.
9. Dispersal will not solve the problem of crowding in the park.
    a. Need a park "carrying capacity" – already reached capacity.
    b. Need a "carrying capacity" for whole island.
    c. Don't develop currently under-utilized resources.
10. If limits on visitation are instituted, there should be an educational campaign for the public.
11. GMP alternatives need to be explained in more detail.
    a. Schematic for proposed Eagle Lake parking. Is it visible from trails of Cadillac?
    b. Is cooperative stewardship the "big stick" option?
12. Statement of Summary for meeting:
    a. We have reached island carrying capacity.
    b. Cooperative stewardship is to guard the park resource and is a good idea.

October 23, 1989: Hancock County Regional Planning Commission

The Regional Comprehensive Planning Committee of the Hancock County Regional Planning Commission hosted a workshop session on the GMP at the Ellsworth Town Hall. Fifteen people attended and discussion was very general without specific questions or proposals. A representative from Trenton stated that their comprehensive plan objectives include limiting tourist related development. The Ellsworth representative was not present.

October 24, 1989: Towns of Southwest Harbor and Tremont Selectmen

Thirteen people attended the workshop held at the Southwest Harbor municipal building including the public and members of the Boards of Selectmen and the town managers of Southwest Harbor and Tremont. Isabel Mancinelli listed the following discussion topics:

- Development of west side (Oak Hill picnic area, Seal Cove Road, Lurvey Spring Road)
- Growth management/overnight accommodations
- Shoulder seasons
- Thompson Island fee station
- Resource mapping

1. Growth Management/General Development
   a. Acadia National Park comprises 50% of the land in Southwest Harbor; it is therefore the town with least number of taxable acres on Mount Desert Island. Carroll Farm and development of other NPS facilities can bring tourists to Southwest Harbor and have a positive effect. Day-trippers are wanted and possibly more hotels.

   b. The type of development makes a difference. Should be quieter than East Side. Picnic areas and hiking trails OK.

   c. More people in the park means more taxes on locals. 75 cents per acre from federal government is not enough. Need to entice more people to Southwest Harbor.

   d. Western side is seen as an escape from Bar Harbor. "The quiet side." Entice people without creating another Bar Harbor.

2. Parking Lots:
   a. Parking should be expanded to accommodate use at the swimming ledges on Echo Lake, Acadia Mountain, and Ikes Point.

   b. Where do you draw the line on expanding?

   c. Parking on the roads is a problem.

   d. Increase parking at Long Pond pumping station in order to bring more visitors.

3. Oak Hill and Pine Hill picnic areas:
   a. Restore for year-round residents.

   b. Bring back what was there in the thirties.

4. Seal Cove Road:

   a. Too narrow and unsafe for two-way traffic.

   b. Widen a few corners. No major improvements.

   c. Needs to be up-graded.

   d. Southwest Harbor and Tremont should give Seal Cove Road to Acadia National Park. People thought road was transferred to the park long ago. Towns don't want to maintain; people would object to the use of town funds.

   e. Who is maintaining Seal Cove Road?

   f. (Possibility of designating a state-aid road?)

   g. Southwest Harbor decided not to give to the park in order to keep access; so park couldn't close.

   h. Agreement in late '60's to close in winter. No real benefit to being open in winter. Impacts of road salt on wetlands.

   i. Should be a paved, year-round road due to historical use of road as "Cross Road" according to Tremont Planning Board in response to GMP. Support joint maintenance.

   j. Southwest Harbor doesn't need to have the road open in winter.

5. Lurvey Spring Road:

   a. One-way proposal OK; either direction.

   b. Should be one-way north.

   c. One-way would make traffic too fast.

   d. Should stay two-way because it can be accommodated.

   e. Restrict RV's

6. There should be no concessions within the park.

7. Cross-country skiing:

   a. Conflicts with snowmobiles. Should designate some fire roads for each.

   b. Move Seawall Barricade to allow for X-C skiing parking

8. Designate Hio Hill Road for horse trails.

9. Move visitor center to head of island or Trenton?

10. Limit size of park groups and use alternate sites. Impact on Ship Harbor this summer is an example of poor management.

11. Extend shoulder seasons to help smaller businesses run by locals. Services offered also benefit the year-round community.

12. Thompson Island Fee Station:
    a. Residents have got to have tax relief, but a toll won't do it.
    b. Park could "capture" fee from more visitors.

October 24, 1989: Acadia National Park Staff

An all-staff meeting was held at park headquarters to respond to requests for more information about the GMP.

1. Duck Brook Road proposal eliminates safety problem for bikes.
2. Safety problem with bridge at Bubble Pond; underpass better idea.
3. Paradise Hill information booth:
    a. Low wattage transmitter or sign instead?
    b. Map dispenser at summit of Cadillac?
4. Oak Hill and Pine Hill picnic areas:
    a. Do a better job with Pretty Marsh and Seawall rather than open new areas.
    b. Pretty Marsh is not utilized now.
    c. Seawall and Pretty Marsh are full at peak times.
    d. Do a study of west-side picnic areas to determine when to add new facilities.
    e. Group picnic site needed where a fee is charged for 6 to 8 tables with a locked gate open by reservation. Develop at Oak or Pine Hills?
    f. No maintenance
5. Dispersal is not the whole answer.
6. Use Cannon Brook trail pull-out instead of new lot at Otter Cliffs Road.
7. Safety problem at Eagle Lake parking. Should approach state to reduce speed limit and eliminate parking in bike lane.
8. Safety and sign committee is looking at problems of parking in right lane of Loop Road.
9. Need uniform signs and architecture for the park.
10. Be conscious of specificity of GMP:
    a. Mix of specifics and generalities in *Alternatives Document* is confusing.
    b. Protection operations missing.
        i. Park housing.

    - ii. New Schoodic housing and ranger station.
    - iii. Renovations of Seawall ranger station.
  - c. Write so that maintain flexibility – "As growth occurs there will need to be corresponding development of support facilities. For example, . . . Seawall and Schoodic."
  - d. Allow for development/use of Carroll Farm.
  - e. No specifics about natural resources and the role of resource management plan.
  - f. What about impacts on management, administration, and operations?

11. Divisions will supply specifics for long-range needs.

October 25, 1989: General Public/Mount Desert Island

A meeting attended by 37 people was held at the Mount Desert Island High School in Bar Harbor. The assembly was presented with the question, "What actions can the park and communities take to slow the rate of growth of visitation and vehicular traffic during the peak season?" The meeting was then broken into three discussion groups.

GROUP ONE (facilitated by Cynthia Kryston and recorded by Bruce Jacobson)

1. Why doesn't Acadia have more $$ as the second-most visited park in the country?
2. Bus system:
   - a. Operated by private sector.
   - b. How different than Yosemite?
   - c. Use alternative power for bus system, eg., electric or steam.
3. What will NPS do if the cooperative stewardship alternative fails? The preferred alternative transfers growth from Mount Desert Island to the mainland; then it is up to the park to limit use.
4. Park is emphasizing the use of cars (i.e., Park Loop Road). Park needs to take a leadership role and force fewer cars, ban RV's, etc.
5. Park must take leadership and set limits.
   - a. Commercial interests will not limit themselves.
   - b. Towns have to change land use laws/regs to limit motels, etc.
   - c. If the park makes it clear that it will not accept more people, less units will be built.
   - d. Towns not ready to listen to park; less hostile than in the past, but...
   - e. Would Acadia National Park prohibit parking on Loop Road?
6. Bar Harbor sewer system cannot support more development. Will the town improve it?

7. Park has to determine its carrying capacity before completing the GMP. (isn't park required by law to determine capacity?)

8. Need study of carrying capacity for Mount Desert Island in coop with NPS.

9. Institute a reservation or parking permit system for Acadia – works at Blackwoods.

10. New bike access:

    a. Must consider the impact of new bike path on the Great Meadow, the Gorge and the Saddle. Rockefeller would have considered ecological impact of building the planned carriage road.

    b. Bikers already have enough access with the carriage roads. Remove proposal from the GMP.

    c. Objective of expanding bike access is appropriate.

11. Did Sand Beach fee station decrease traffic (down 5%)?

12. May through October is a desirable season for Mount Desert Island. Is park trying to extend the season?

13. GMP uses terms such as "quality experience," "selective advertising," and "minimal impact," be specific about meaning what is acceptable?

GROUP TWO (facilitated by Lauren McKean and recorded by Judy Hazen)

14. In favor of shuttle bus around Loop Road.

15. Remove or restrict RV's on Loop Road.

16. Protect environmental values above all – restrict concessions and other development.

17. Why have facilities been let go? What are management priorities?

18. Federal facilities: Why should local communities pay for impacts brought on by the park?

19. Approve of the spirit of cooperation in the planning effort.

20. What is "quality experience?"

21. Somesville residents might approve of keeping the west side wild. West side has values which could attract visitors.

22. Like emphasis on east side for development and increased visitation.

23. Programs:

    a. Local people enjoy interpretive programs in spring and fall.

    b. More programs for seniors.

24. Expanded season is good for local economy.

25. Good idea to work with towns to slow increases in growth.

26. Where is the end??!! "Slowing the rate of growth is infinite; when do you get to the point where there are just too many people?

27. Emphasize loop trips on carriage roads and trails.

28. Encourage visitors to get out of their cars.

29. Don't try to be all things for all people.

30. Bikes:

    a. Bike trails OK; just don't get out of hand.

    b. What about bike path just to Bar Harbor?

    c. Bike paths good; get people out with minimal impacts.

31. No specifics on resource protection in GMP – why not? Mention inventories, monitoring of wildlife, effect on ecology.

32. Vista clearing is OK, but must educate public.

33. Park people should get out of their cars.

34. Good to restrict right-lane Loop Road parking on curves.

GROUP THREE (facilitated by Isabel Mancinelli and recorded by Mike Blaney)

35. Roads:

    a. Establish a carrying capacity not based on standards for rural highway (too high, different purposes; i.e., to get from one place to another, not a scenic drive).

    b. Impact of State Route 3 rebuilding on Northeast Creek access.

36. Shuttle bus to developed areas such as Cadillac a good idea.

37. Cooperative stewardship alternative:

    a. Towns bear brunt of the plan.

    b. Can park live with cooperative stewardship and/or restricted access combination?

    c. Need a solid voice from the communities.

38. Restrict use:

    a. Restricted access should be the preferred alternative. Make this alternative more reasonable and workable.

    b. Reservation system if necessary for quality experience.

    c. Measure and monitor impacts of growth on all resources (human, biological, economic).

   d. No more parking lots.

   e. What can towns and park do with more people?

39. Keep west side the same.

October 26, 1989: State Agencies and Maine Nonprofit Organizations

The Maine State Planning Office hosted a workshop in Augusta for Maine state agencies and nonprofits with an interest in the future of the park. Thirteen people attended representing:

- Private Organizations
  - Maine Coast Heritage Trust
  - Natural Resources Council of Maine

- State Agencies
  - Baxter State Park
  - Bureau of Parks and Recreation, Maine Department of Conservation
  - Coastal Program, Maine State Planning Office
  - Critical Areas Program, Maine State Planning Office
  - Land for Maine's Future Board, Maine State Planning Office
  - Maine Department of Inland Fisheries and Wildlife
  - Maine Historic Preservation Commission
  - Natural Resources Division, Maine State Planning Office
  - Office of Comprehensive Planning, Maine Department of Community and Economic Development
  - Office of Tourism, Maine Department of Community and Economic Development

1. Growth Management:

   a. Ability to limit visitation to the park using growth management is a shaky assumption.

   b. Skeptical about reliance on self-regulation of towns.

   c. Lodging is not just an island issue.

2. Restricted Access:

   a. What is the carrying capacity of the park – is it number of vehicles or number of people?

   b. What is the threshold – is it conflicts between bikes and pedestrians; number of bikes? When people get out of their cars, there is more opportunity for "social" conflicts – what conflicts have been identified.

   c. Park roads are not rural roads – people stop for photos, etc. Will rural road standards really work?

3. Dispersal:

   a. Can dispersal slow visitation?

   b. Will people want to disperse?

   c. Will increased options increase visitation?

   d. Long-term studies to see if dispersal is an effective way to reduce congestion.
   e. Dispersal is working at Baxter State Park. People accept once they understand.
   f. As Acadia offers more diverse experiences, it is important that interpretive staff explain the changes and the reasons to the public.
   g. People like to congregate and do what everyone else is doing.

4. Bus system:
   a. Can reduce traffic by simply offering buses? Why would people choose to give up car?
   b. Will there be a charge to recoup cost? If use really is restricted, will there be enough income to support bus? Will NPS fund for a two-month season?
5. Coordinate with State parks to disperse visitors to other parks.
6. State of Maine tourism promotion is aimed "upland and inland."
7. Overnight camping at Schoodic?
8. Characteristics of visitor is as important to planning as information about the resource.
9. Bike connections to off-island communities?
10. Will the park receive more of the $5 fee for staff to conduct natural resource inventories and monitoring of visitor impacts?

October 26, 1989: Bar Harbor Town Council

The Bar Harbor Town Council, members of the Planning Board, and the press met with the planning team at park headquarters. Twelve people were in attendance. The following topics were listed by Isabel Mancinelli for discussion:

Shuttle bus
Growth management/Overnight accommodations
Duck Brook Road & Schooner Head Road
Route 3 reconstruction
Thompson Island fee station
Shoulder season
Resource mapping

1. Manage tourism throughout the season.
2. What method is proposed for slowing the rate of growth?
   a. Hard to convince the commercial community to limit available rooms.
   b. Off-island accommodations will grow.
   c. Town of Bar Harbor must decide if it will limit growth by overloading of facilities (eg. sewers) or by a consensus of citizens.

   d. Simply stating limited growth as a goal has an effect.

3. Towns and park have to work together.

   a. Towns on Mount Desert Island will not solve problems for the park; eg., July 1989 day-trippers, etc.

   b. Acadia may shut gate and visitors will go downtown.

4. Can solutions to Acadia National Park problems be found in other parks; eg., Great Smokies, Yosemite, or Canadian parks?

5. National demographic trends as a base for planning?

6. Limited access alternative must be held as a backup alternative if cooperative stewardship is pursued.

7. Will dispersal and increase in diversity of experiences change use of the park resource? Will it have a negative impact?

8. Continue to explore exit from Loop Road at Hunter Brook.

9. Bar Harbor/park bus system:

   a. Town Council supports.

   b. Benefits both town and park.

   c. Can NPS help town with funding?

   d. May be problems with parking RV's and cars due to ball field deed restrictions.

   e. Loop bus increases park capacity and enhances interpretive experience for visitors.

   f. Restricting RV's on Loop Road will encourage use of bus.

10. Ellsworth shares the burden of tourist services. Will mechanisms for growth management be effective if they are not involved?

11. Duck Brook Road proposal:

    a. Great idea.

    b. Improvements to "other end" of Duck Brook Road?

    c. Joggers would object to proposal.

    d. Would need parking on West Street?

12. West Street Extension is a problem too.

    a. Make it an "entrance only" onto Loop Road?

    b. Signs are confusing on Loop Road. At least remove signs directing traffic to Bar Harbor on West Street. Confusing intersection to tourists.

   c. (State owns land on West Street.)

13. Schooner Head Road

   a. Bikeway OK on park land. Town just redid the road (and removed the bed for the proposed bikeway in many sections).

   b. How much money would town have to spend?

   c. Limit vehicle access to residents only?

   d. Close park section to autos?

14. Thompson Island fee booth:

   a. A scary idea.

15. There are other options for generating revenues such as local option tax.

   a. A slap in the face for visitors and a hinderance to NPS experience.

   b. A good idea.

   c. An annoyance.

   d. Put electronic signs on the Maine Turnpike as an alternative – "Mount Desert Island Full."

15. Current advertising not informing visitors of other options, eg., shoulder seasons.

October 30, 1989: Acadia National Park Advisory Commission

Seven commissioners and one reporter attended the workshop at park headquarters.

1. Emphasizing use of carriage roads by bikes is a good idea.

2. Signs:

   a. All signs need improvement.

   b. Information at trails about length, etc.

   c. Schoodic has repetitive signs; eliminate.

   d. Improve signage to Loop Road. Many miss Sieur de Monts entrance.

   e. Signs to services on island?

   f. Consolidate rather than add to number of signs.

   g. Cooperate with state on Route 3; east-west designations confusing.

3. Duck Brook Road proposal:

   a. Limited access for cars is a loss; would be better to close to cars completely rather than change to proposed use.

4. Public information:

   a. Tell visitors about side-trips in region to disperse use.

   b. Consolidate brochures with the private sector.

5. Would diversion to west side reduce east side visitation?

6 Need to maintain what is in the park before expanding facilities.

7. Baker Island farm landscape should be restored.

8. Limiting visitation & Thompson Island fee station:

   a. Bar Harbor doesn't want to have the image of charging fee for access to Mount Desert Island.

   b. Put fee station for park at Thompson Island. OK idea, but will eliminate the choice of visiting portions of the park without paying a fee.

   c. Thompson Island fee station will cause more congestion.

   d. Island fee as a deterrent to visitors is not a good idea. Concept of "user fee" OK to support services. So if a fee is charged, a portion should go to the towns.

   e. Fee at the head of the island will pay for tourist use of Seal Harbor beach, etc.

   f. Who decides when the limit is reached and to turn visitors away?

   g. Whole island needs to recognize impacts of visitors, eg., Town of Mount Desert does not thrive on tourists.

   h. How to control visitation?

   i. Cranberry Isles can't support more tourists.

   j. Control of rooms on Mount Desert Island will not solve the problem.

   k. Problem is not unique to Mount Desert Island; contact Nantucket and Marthas Vinyard.

9. Institute a fee for Cadillac.

10. Oak Hill and Pine Hill picnic areas:

   a. Developing them would not keep the west side "quiet." Would picnic areas divert use from east side?

   b. Develop them for locals?

   c. Develop only one.

best copy available

   d. Opportunity for picnicking is limited.

11. Concessions:

    a. No more concessions in the park. Thunder Hole and Cadillac gift shops are inappropriate.

    b. Concessionaires can sometimes provide services for less money than NPS. Don't rule out all.

    c. Does stable concession make proposals to Acadia National Park for future uses?

    d. Expansion of concessions OK when initiated by the park.

    e. Use gate lodges for park housing, not concessions.

12. Horse use:

    a. No more horse activities in park; camping, etc., not a good idea.

    b. Horse lovers want to camp with their own horses.

    c. Opposed to overnight accommodations at Wildwood.

    d. Most owners willing to stay off-site if they know horses are well cared for.

    e. Boarding of horses supports original purpose of the carriage roads.

13. Change name of "Thunder Hole" to "Ocean Drive Stop" to limit use.

October 30, 1989: General Public/Bangor

Twenty-eight people attended a meeting at the Bangor Civic Center.

1. Why limit use on the west side?

2. Shuttle bus in park should be encouraged.

3. Increase visitor/ranger contacts.

   a. Encourage stewardship of park.

   b. Bring back "ranger on horse-back?"

4. Will towns truly cooperate with the park?

5. Will new visitors center be designed so it can be expanded?

6. Use of carriage roads

   a. Donated for horses.

   b. Conflict between horse and bikers. Bikers are expanding into horse areas. Road surface is a problem.

   c. Need to separate hikers, bikers, and horses?

   d. Shared use seems to be working.

7. Horse camping/boarding:

   a. What is the process for decisions about use of Wildwood?

   b. How can public respond to supt.'s decision regarding horse camping?

   c. Horse boarding not a good idea – health problems for horses, insurance issues, owners not able to keep responsibility for own horse if camping option is removed.

8. Impact of increased horse trailer parking on Loop Road lots; Wildwood works now.

9. Consider off-season use of Wildwood.

10. Bike rentals & gift shop too much for Wildwood; cause more congestion.

11. What is the process for the GMP?

12. Develop a down-hill ski area?

13. Yes, open vistas.

14. How to accomplish air quality goal; isn't it a national issue?

15. Water quality:

   a. Identify detrimental impacts.

   b. Motorboats should be restricted. What is the state's attitude? Canoes and nonmotorized boats OK.

16. What is process for concessions contracts? Who owns facilities?

   a. Delay contract for Wildwood until GMP complete.

   b. Look at other NPS units that accommodate horses in planning.

NEWSLETTER RESPONSES

Newsletters with response forms were distributed to gather public comments in the summer of 1988 and the end of 1989. Summaries of the responses are presented below.

RESPONSE FORM SUMMARY

SUMMER 1988

❶ **Which of the five alternatives presented comes closest to what you would like to see in the future for Acadia National Park ?**

Total number of responses = 228

	no.
No Action Alternative	2
Minimum Action Alternative	11
Mandatory Transit System Alternative	15
Voluntary Mass Transit Alternative	60
Non-Mass Transit Alternative	21

Suggested Combinations	
alternatives 4&5	6
alternatives 2&5	2
alternatives 2&4	1
alternatives 374	2
parts of each	3

COMMENTS:

•MANDATORY: for campers & large vehicles only; in peak times only; to most popular spots; is too expensive.
•VOLUNTARY: best for balance of control and freedom; allows for more interpretive contact; will not lead to increased pressure on the west side.
•NON-MASS: approaches the problems without changing the character of the Park.

- all but Minimum Action contradict the basic premise of providing use of the Park for the public.
- something must be done before the Park is destroyed.
- Americans, except those in cities, do not voluntarily leave their cars.

Are there important Park resources which you feel these alternatives might fail to protect? If so, what are they and what might be done to protect them?

- pollution from busses.
- NPS needs to be more vocal about development of the coast & encourage long term planning.
- increased pressure on the west side.
- get jurisdiction over waters 1 mile out as refuge.
- monitor effects of lobstering.
- low bus service.
- have shuttle bus from Bar Harbor and Vsitor Center.
- Ocean Drive must be accessible by car.
- lease buses for a trial period.

- it would have to be mandatory for it to work.
- have quick access to your car.
- convenience for hikers.
- large discounts for residents and handicapped and youth groups.
- must protect the west-side/ don't disturb the animals.
- important to protect the hospitality and feelings of freedom and the balance between nature and mankind.
- cut the traffic on Cadillac.
- Visitor Center is very attractive.
- seen buses work in other parks.
- have a mass transit.
- decrease automobile use while minimizing the development.
- come to park to get away from buses.
- charge $1 per person to pay for natural resources.
- create additional management problems.
- busing would offer new options for hikers.

❷ **Should the Park provide buses to the most popular destinations within Acadia National Park (such as the summit of Cadillac Mountain, Sand Beach, and Ocean Drive) for those who would voluntarily leave their automobiles?**

YES	177
NO	15
UNSURE	2

- mandatory in peak season, voluntary in off season.
- charge a small fee.
- I don't expect demand to be that great.
- expand private operators of busses.
- only allow a limited number of busses up Cadillac.
- if they are free & frequent.
- would make it safer and easier.
- a few buses may help for people who want to see just a few sights.
- no huge parking lots for cars.
- tape running on bus to narrate a little about the Park.
- the reservation system would allow more family togetherness.
- it is too expensive.
- incentives to use shuttle will coax people out of their cars.
- have a bus that goes around the Loop Road and Route 233.
- could be tried as a first step.
- be sure buses are not polluting.
- good for people who have been to park before and just want to see one place.
- an ID card should be given to people who ride the bus.
- good place to start then expand the system more.
- help in easing traffic congestion.
- not only for those who would leave their cars but for those without automobiles.
- buses should be provided for popular places.III
- separate traffic lanes should be done for park buses.
- don't want to see park dominated by buses.
- what about pets?

❸ **Strong support has been expressed for limiting parking areas to those that now existing in the Park. Should parking continue to be allowed in the right-hand lane of the Loop Road to accommodate increasing demand or should it be limited to existing parking lots?**

CONTINUE RIGHT LANE	98
STOP RIGHT LANE	106

- right lane parking allows one to stop anywhere and spreads the people out.
- allow right lane parking in off season only.
- designate certain areas for right lane parking only.
- parking in right lane will decrease need for more pavement.
- allow only two-hour parking in right lane.
- use right lane for bicycles and buses.
- right lane parking is not necessary with shuttles.
- have more ranges to patrol right lane.
- limit right lane parking only during peak periods.
- right lane has to be allowed until a bus system is running.
- save existing lots for off season, use mandatory busing during peak season.I•
- right lane parking is unsafe.
- right lane parking is good for handicapped visitors.
- use right lane for bikes
- parking lots are terribly inadequate.
- two way driving should be reinstated.
- has to be allowed until bus system is ready.
- right lane should be for bicycles.I
- cars should be limited until buses are provided.
- bigger parking lots.
- only allow where safety permits.
- right hand parking is to dangerous.I
- try it for 2 or 3 years.
- limit to parking lots.I
- some added lots are needed -numerous small lots would be best.
- parking on loop road is ok.
- bike lane needed.I
- let those who plan on driving expect to be stopped to use the voluntary bus.
- don't accommodate any more cars than that can be handled.
- push walking.

❹ **It has been suggested that Acadia National Park should allow more extensive automobile access in the winter by plowing more of the Loop Road. What is your opinion?**

YES	97
NO	44
UNSURE	10

- excellent idea.
- encourage off-season use.
- also have more interpretive programs.

- allows enough access already.
- would love to see this area in the winter.
- try it for 2 or 3 years.
- should not encourage year round use.
- plowing expense could be used wiser.
- would provide safer winter access.
- too potentially hazardous (ice).
- as long as it does not disturb the animals.
- ok, as long as it does not disturb animals.
- this increases need for salt and sand, which brings more environmental damages.I
- only if it will help the traffic problem in the summer.
- encourage cross country skiing.
- leave as it is.
- require tire chains or 4 wheel drive vehicles.
- have shuttle bus for skiers.
- have one or two interpretive programs.
- isn't much to do in the area that is plowed.
- improve access for winter time use.
- would increase damage to park.
- improve Schooner Head road and Otter Cliffs.
- not enough people use it and would be a waste.
- should not encourage year round use.
- beautiful area in summer could be in winter too.
- depends on if needed by other than summer visitor.
- let the animals alone, they have a hard enough time in the winter.
- less access with snowmobiles.
- visitation in winter would not slow down summer visitors.
- lessen impact by not using in winter.

❺ **Should a new access road be constructed between the Loop Road and Route 3 south of Otter Creek? Why or why not?**

YES	93
NO	49
UNSURE	6

- will damage resources and there are higher priorities.
- more places to get off the loop road quickly are needed.
- no, limit use of the Park.
- not necessary if adequate bus system is provided.
- for bicyclists only so they don't have to go the wrong way back to Blackwoods.
- sufficient access exists.
- will relieve congestion.
- will relieve pressure at confusion corner & help plowing in winter.
- why allow more access?
- yes, it provides bypass of Jordan Pond/Bubbles area to get back to Bar Harbor.
- this would allow traffic numbers to rise.
- encourage bikers and busses, not cars.
- if needed for emergency vehicles.
- the Loop Rd. should be kept scenic and environmentally sound, and not be used as a traffic connector.

- public vs. Park roads would be further confused.
- access is terrible.
- would help the flow of traffic move smoother.
- good idea.
- mass transit would not require this expenditure.
- need more and clearer road signs.
- minimum construction best.
- increases time cars spend on the road when you miss the original park entrance.
- easier access will cause greater traffic.
- Acadia has enough roads.
- encourage paths, and trails.
- will help take traffic off the Loop Road and let it return to Bar Harbor.
- road is not in good shape so anything to lessen it on the Loop Road is a help.
- would be easier to go out in the Park with this.
- make Park less accessible to cars and provide shuttle buses.
- only if it will cause less congestion and not ruin the park.
- unneeded at this time.
- only if its not environmentally damaging and expensive.
- relieve traffic on part of the Loop Road.
- easier access from Loop Road to bypass the Jordan Pond/Bubbles are back to Bar Harbor.
- with this more partial Loop visitors.
- Park and Island aren't big enough.
- there are enough access roads.
- new access should be built so to permit cars to leave and enter at that point.
- use it for emergency vehicles and for the extended winter.
- this only allows traffic to rise.
- would increase traffic through these areas.
- Seal Harbor would have reduced traffic.
- could always close up if too busy.
- would minimize traffic through towns.
- good for campers at Blackwoods.
- unfair to village life.

⑥ **Should the Park institute a free reservation system for access to Cadillac Mountain during peak periods? If not, what should be done to relieve congestion at the top of the mountain?**

YES	102
NO	33
UNSURE	4

- this seems to be necessary.
- try busses and pass system first.
- make it first come first served when lot is full.
- good idea as long as it gives visitor fair access.
- use busses only.
- no, just increase staffing.
- cars by reservation only.
- have a sign at bottom saying when lot is full.
- reservations would inhibit visitors too much.

- the park should be open at every hour for everyone.
- use buses during peak periods.
- no more R.V. and bicycle traffic up hill.
- provide Option 2 or reservation system.
- limit from July 4th to Labor Day.
- charge fee.
- control access only when too full.
- stopped traffic on Cadillac is too dangerous.
- provide a free bus to Jordan Pond.
- close road to public.
- walk to where you want to go.
- seems to be necessary.
- try buses first and then pass system.
- make it first come first serve.
- buses only.
- institute a reservation system for access to Cadillac Mountain.
- have visitors restricted to buses during peak periods.
- free reservation during peak seasons.
- annoyance to staff and visitors.
- use a sign at the bottom of mountain telling people it's full.
- public transit system only.
- Park should be open at every hour for everyone.
- prohibit visitors in cars.
- should be allowed only in areas that will not endanger the tidal areas.
- use mass transit.
- volunteer traffic directors.
- reservation system is too strict for people who might change their plans.
- try it for one summer.

❼ **It has been suggested that the Thunder Hole Gift Shop be converted into a interpretive facility? What is your opinion?**

YES	216
NO	11

- have facility for both.
- need for tourist information is great here.
- put gifts at Visitor Center.
- have more frequent group activities here.
- restrooms should be a big priority at Thunder Hole.
- don't close down buildings, add on to explain road system better.
- already enough gift shops in Bar Harbor. IIIII
- unless gift shop is profitable to park, close it. II
- put information centers at all facilities. II
- current situation is just as bad as McDonald's. I
- use building for storage equipment.
- questions could be answered here instead of going all the way to Visitor Center
- decrease commercial aspects of Acadia.
- encourage use of park by teaching visitors about the resources.
- encourage use of park by teaching visitors about the resources.
- use Fabbri as an information, ranger, and interpretive center.

- do you really want to keep Thunder Hole as an attraction spot?
- have facility for both.
- increase horse rental and guided tours.
- get visitors to learn how to preserve the park.
- eliminate all gift shops except books at visitor center.
- perfect place to catch visitors who have missed the visitor center.
- cut down on congestion at Thunder Hole.
- more consistent with the mission of the Park.
- gift shops belong in town not Park.
- Interpretive programs make visits to Park more meaningful.
- not sure what interpretive program is.
- like to see more ranger programs.
- Cadillac is so crowded due to gift shop.
- leave restrooms at gift shop.
- build interpretive program at one of the parking lots.
- shops are overcrowded and congested.
- shop is dreadful.
- encourage visitors to talk to interpreters.
- more in keeping with the parks nature.
- can Park afford to give up revenue?
- every option should be taken to give education to the public.

⑧ Other issues on which you would like to comment:

- from Trenton to Bar Harbor there are signs for a bike lane, but none exists; please make one.
- focus the approach of the GMP on protecting natural resources rather than managing people.
- examples to look at: Grand Canyon/McKinley National Park/Disney's techniques of moving people.
- more education on the fragility of Acadia is needed.
- emphasize more jobs over more development.
- place more emphasis on beauty, less on "vacation" activities.
- development of the Carroll house is a contradiction to the statement: "no program changes will occur on the West Side."
- the Park is over crowded in the Vjisitor Center and on programs as well as the Park Loop Rd.
- improve the bike access both within the Park and between the Park and towns.
- provide buses that can carry bikes form towns to access points outside park.
- keep the Park non-commercial.
- provide protection by a reservation system that limits the number of people coming to the Park, and be involved in Island wide Planning.
- congestion at Jordan Pond parking areas are awful.
- provide better maps for Island area.
- get bike lanes on the Park Loop Rd.
- more work on Carriage Roads is needed.
- fees are too low & seniors should not get in free.
- more picnic facilitiesand lavatories.
- enlarge camping sites and add electricity to campgrounds.
- utilize the Carroll House.
- entry fee money should not be shared with other parks.
- more signs on ecological flora.
- roads on Seawall side are not marked.
- say where R.V.'s will fit.
- more interpretive programs.

- number of sites for R.V.'s should be increased.
- better signs showing where you are in relation to the rest of the park.
- additional fresh water swimming areas.
- stairs to Visitor Center and Sand Beach are too much for the elderly.
- no more structures like the Jackson Lab facility.
- generators are disturbing the natural sounds of the night at Blackwoods Campground.
- limit number of cars in the Park.
- more space between Seawall campsites.
- raccoon-proof garbage cans.
- have shorter stays at campgrounds to provide for more people.
- charge for use of parking lots.
- close tollgates and use staff in roving patrols.
- eliminate exits from Loop Rd.
- better interpretation is needed at Visitor Center
- forbid motor homes & bicycles form Loop Rd. at peak periods.
- provide shuttle buses for hikers.
- better access to Visitor Center and more information there.
- provide hot showers/laundry for revenue at campgrounds.
- full time assistance at campgrounds is needed.
- better maps for Island area
- more picnic facilities and latrines, garbage containers.
- Park must be protected and preserved.
- enlarge camping sites and add electricity to campgrounds.
- send fliers out telling people that June, September, October are good months to visit the Park.
- more bike access to town.
- need transportation from bike shops to Carriage Paths.
- more horses and carriage rides.
- more handicapped places.
- don't let it be destroyed like Yellowstone.
- provide areas where dogs can run off their leashes.
- hiking trails should be better marked and mapped.
- the roads aren't clearly marked either.
- houses on Schooner head ruin the visit.

RESPONSE FORM SUMMARY

DECEMBER 31, 1989

The following reports the comments received from the "Planning for the future of Acadia National Park Response Form "that was included as a pull-out section in the "Acadia National Park Planning Update / Alternatives Document."

Of the documents which were distributed during the Summer and Fall of 1989, two hundred and fifty-seven responses were received by December 31, 1989.

Representative comments from respondents are grouped under the appropriate subject heading according to the number of people who shared a similar view. Numbers in parentheses indicate the frequency that a similar sentiment was expressed: "(>1)" means more than one person held similar views, "(>5)" means more five people were like-minded, and so on. Comments from single respondents are listed last, without parenthetical numbers.

❶ **Do you agree with the Planning Team's recommendation of "Cooperative Stewardship" as the preferred alternative?**

212 = Yes
33 = No
8 = No response
4 = Maybe

Suggest Cooperative Stewardship be combined with Restricted Access (>25)
Suggest Restricted Access be adopted now (>15)

❷ **Do you have any suggestions or comments on aspects of any or all of the alternatives as presented? Please write them here and/ or on additional paper.**

200 = Written comments from respondents: See below for key comments .
57 = No response

GOALS FOR VISITOR USE AND RESOURCE MANAGEMENT:

"I feel the recreation aspects of the park have been given far more emphasis than the preservation mission. I realize Congress has given you missions which are not really compatible, but I feel the balance is currently heavily in favor of recreation aspects."(>1)

"...In other words, DO EVERYTHING YOU CAN TO DISCOURAGE PEOPLE FROM COMING TO ACADIA. Too many will come no matter what you do, so make it as unattractive as possible."

"For Resource Management - Protect WHOLE NATURAL UNITS inside AND OUTSIDE of the Park Boundary by cooperative actions with other public and private conservation agencies..."

COOPERATIVE STEWARDSHIP ALTERNATIVE:

"I am concerned about commitment. Will the towns seriously deal with the issues in a forthright way and is the government capable in these times of budget deficits of funding various aspects of an expensive alternative?"(>5)

"...the majority of growth has been in the Ellsworth-Bar Harbor corridor. That problem needs to be addressed in the plan in order to keep any overnight accommodations limits realistic."(>5)

"I do feel that the Park must define in a much more precise way what it does mean by this term. What exactly does the Town contribute in this cooperation and what does it gain?"(>5)

"So the Park Service has to be in the lead in this effort, and in some ways have a veto power if it is to be successful."(>1)

"The communities of this island are very adaptable, the history of the island demonstrates that fact. While it is highly commendable for Acadia to work with the island's towns to solve the current and future problems they both share, only Acadia can claim true concern for itself. No matter which approach Acadia takes, island towns will exploit and prosper."(>1)

"I am unclear how Cooperative Stewardship, attractive though it sounds, will 'slow the rate of increased visitation'."(>1

"(1) Assumptions: As stated, the assumptions are biased in favor of either Cooperative Stewardship (hereafter, 'C.S.'), or Restricted Access ('R.A'., hereafter), depending upon how one argues. That is possible because the C.S. assumption is inconsistent, exhibiting bad logic and poor wording. Let us explain.

All 3 options other than C.S. state an expectation that its visitation for each year will be at least 104% of the previous year's visitation. C.S. states its hoped-for goals as the assumption. This makes comparison difficult because it invalidates, say, contrasting R.A. versus C.S. It seems two things were tried here that weren't worked out properly. One was to simply list the features of several options obtained by canvassing the public, side-by-side and solicit comment. The other was to start with a set of assumptions and evaluate options presented as to their implications and impact upon visitation and resources.

The latter seems the reasonable course, relying on a fair portrayal of ITS RESULTS in a format like that used. This would entail a rate flow breakdown of visitation, and allocating budgets of capacity and harm thresholds for the several resources and facilities in the Park and the surrounding community. One then could assess the impacts of policy — assuming policies worked — upon resources and visitation rates.

As presented one has no clear idea of which option will do what. It seems the 'Planning' form seeks a referendum on C.S., but gives actually no choice in alternatives (not because there aren't any) but the Cooperative Stewardship option...

(2) Summary: The upshot, if the options are to be read literally, is that a new visitor center is inevitable along with preservation and rehabilitation of cultural resources. There's no problem with either of these choices; it's just that we can't tell — nor can you if the evidence shown is all you know — if either is required or how much it will add or detract from other important aspects of running Acadia. There is also quite some naivete in the expectation that mere cooperation among private, State, and federal organizations will compensate for lack of funds. We are living through a time of austerity, and priorities are more important now than ever..."(>1)

"Cooperative Stewardship alternatives are vague and are proposals for action by others. They are not even proposals in negotiating form. They seem to be a cop-out by ANP, putting the onus on town governments and businessmen to act in ways that are simply not possible."

"The idea of cooperation with the private sector is all right in theory, but must be very carefully instituted and managed. What can be commercially successful and what the Park needs or wants are not necessarily the same. The size and scope of the privately owned aspects should be carefully decided IN ADVANCE of seeking bidders....That is, private businesses should not be the proposers of ideas, nor those who set the tone."

"...However, I DO NOT AGREE WITH IMPROVING DISPERSED FACILITIES TO SPREAD OUT USE. I would suggest concentrating use in a few areas that are best suited for it, Eg.Sand Beach, Thunder Hole and the Loop Road."

"It is difficult to believe in a continued 4% growth in attendance considering the US population increase and population trends in the North East."

"Although the MDILWW [Mount Desert Island League of Women Voters] Board strongly favored the Cooperative Stewardship alternative, there was a feeling that it is incomplete. We feel that the ANP in cooperation with the towns should determine an optimum number of visitors for the Island then find means of limiting the number to that figure. Unless this is done, no management devices will fully protect the natural resources of the Island and maintain the integrity of the small communities outside the Park."

"[I agree with the Planning Team's recommendation of Cooperative Stewardship as the preferred alternative] as it applies to common problems, i.e. traffic, law enforcement and environmental issues. How each town approaches issues of growth management will have to done individually, through their own comprehensive planning process."

"I disagree with statements such as 'park operations would be adequately funded.' That assumption is a very shaky one. Even with growth slowing, it will take a massive improvement in funding to catch up to present needs."

RESTRICTED ACCESS ALTERNATIVE:

"Lets determine, now, optimum numbers of visitors and implement a reservation system like Baxter State Park's for 1991 and beyond" (>5)

"Visitation growth will require movement to the restrictive alternative." (>1)

"Restricted access to the people who OWN the Park is unthinkable!" (>1)

"I agree with others who have commented that the restrictive access alternative should be made more positive, more feasible, and that a threshold for visitation should be set which would trigger adoption of this alternative — any threshold should be set on a combination of visitor experience, resource damage and funding."

"I see nothing in the document about the ultimate carrying capacity of the park. This seems to me to be key to any plan. It has been much talked about and I even seem to remember that it was to have been determined by now. The park needs to put a minimum figure on visitation, beyond which it will simply turn people away or trigger the 'restricted access' code. I think without determining the carrying capacity that mangers tend to continue to improvise ways to accommodate the crowds to the detriment of the park and its visitors. In my opinion we have already reached that point.."

"I like restricted access, particularly for cars and RV's, which must be controlled."

"The restricted access alternative seems too strict and should be avoided if at all possible! Particularly, restricting the numbers of visitors in a day seems like such a sad alternative."

"Address specific use problems separately. If there's too much traffic on Ocean Drive, consider elimination of autos on that stretch of rood. DON'T DENY ME ACCESS TO THE PARK or any part of it. However, if you provide alternative transportation, I can learn to live without my car in the Park."

TRANSPORTATION and PARKING:

Buses

"Providing shuttle bus service on the loop road (including Cadillac) is a great idea!" (>10)

"Please consider an alternative to a fleet of buses!! They pollute the air and desecrate the landscape..." (>1)

"I think most people would love to avoid the hassle of being lost looking for things when a bus could drop them off at different spots where they could get on the next bus when they had seen enough."

"Something has to be done to limit autos — the suggestion for shuttle/bus systems (or a monorail like Disney?) would prove effective if maintained on a continuous route, making stops at 'highlights.' In fact, Disney was a great planner (yes, I hate to compare an amusement park with a National Park, but Disney planned rides, etc. to deliver visitors to highlights in an enjoyable manner. So many of our visitors to Acadia would like a similar experience — they are not interested in anything but the Loop and do not wish to hike or partake in programs).

"Encouraging buses is a mistake, it will pass control of the park to bus drivers. At present, number of people at areas such as Sand Beach is controlled by parking, with shuttle buses there will be no such easy control. Will rangers be able to tell people not to get off bus, or turn away cars when there are empty spaces? Rest room capacity at most sites in inadequate for tour buses, so buses should be banned until this is remedied."

"Harpers Ferry is instituting a shuttle system to get visitors into the historic community from a staging area. Consider contacting them for details."

"Why are private tour busses excluded from regulation or prohibition? Regulating access by numbers of vehicles of all kinds is reasonable if an adequate bus service about the Park exists to compensate. It's silly to have people drive some place and not be able to park. The National Zoo in Washington, D.C. has such a system, and when loaded, the Zoo becomes chaotic and none has a pleasant visit."

Fee Station

"I support a fee station on Cadillac Mountain Road." (>1)

"The control point for the Park should be at Thompson Island along with the present toll booth by Sand Beach."

"I support maintaining a single fee station at the present location. Additional toll booths and restricted road access, I fear, would needlessly limit the number of people able to access the park roads. I would be particularly concerned with a toll booth at Stanley Brook, which could restrict access and require an entrance fee from Jordan Pond House patrons. I question the need and function of the proposed information booth on Paradise Hill Road."

"Fees - am in agreement with Dick VanderZanden's suggestion for collection area at Thompson Island and $1.00 add-on for distribution to the towns to help offset local services for park visitors paid for by local tax dollars. For at least ten years this idea has been jokingly suggested. Perhaps the time has come for its serious consideration."

"I feel that National Parks must make a real effort to serve the citizens of limited budget as well as the more affluent members of society. Perhaps the Park could be open FREE to all comers after the first of Sept."

"Would like to see fee system expanded to generate more revenue. Require fee payment at visitor center to use any park facility. Most users would like this if money went to improve services."

Right Lane Parking

" Parking should be allowed on right lane of Loop Road where geometry and safety permits." (>10)

"The restriction of parking on the Park Loop is a great idea, but only if the shuttle bus arrangement allows people to get off the shuttle at regular intervals, and get back on another shuttle that follows at a reasonable short interval. One of the great features of Acadia has always been that folks can stop almost anywhere on the loop, wander around the cliffs or woods, and continue along at their leisure. I hope that this feature will not be lost." (>10)

"Strongly urge discontinuation of parking on loop road from Sand Beach to Otter Cliffs — this is an accident waiting to happen."

Parking

"Stop building new parking lots!!" (>5)

"Please do not put new parking facilities on the south side of 233 at Eagle Lake as proposed on the map. Either expand north side parking or leave the parking lot as currently sized" "Existing handicapped spaces are not used." (>5)

"More pavement, no matter what the justification, is still more pavement. This solves nothing."(>1)

"Also greater parking capabilities at Sieur de Monts to accommodate bikers' cars as Eagle Lake parking is often over-crowded."

"If a shuttle bus system is successfully implemented, I do not feel it should be necessary to build a NEW parking lot at Eagle Lake. Make handicap modifications to existing lot."

"There should be more parking available for launching of boats only at Eagle Lake."

"No! Already too much congestion [at Eagle Lake]! Visible from Cadillac. Why not at West Street Extension entrance and use Duck Brook Road to access?

"The basic problem at Eagle Lake of overcrowded parking will always exist until better info can be gotten out to bikers/skiers/runners re: ALL the available access in the Park to the carriage roads. People are directed there because it is easy to direct them to that point. A big objective of the Cooperative Stewardship Alternative ought to be assisting interpretive handouts and signing, IF you are committed to dispersal."

"If intent is to disburse use, why not Sargent Mountain for Giant Slide Trail [instead of Rt. 3]. Champlain complex and Dorr are already overused."

Lower Mountain Road

"Keep Lower Mountain Road two way"(>5)

"No more one-way roads." (>5)

Accessways

"I think it is a fundamentally bad idea to exclude roads from a map as means of limiting access. Mark them 'Closed to the Public' or something, but don't intentionally create an incorrect map that is BOUND to confuse even a slightly observant visitor! You and I may know where Ledgelawn and Kebo are, but others are certainly going to wonder where these mysterious roads lead, or mistake them for other marked roads." "Much of visitor confusion about Park boundaries and Park Loop Road is due to poor maps — I am appalled to see that under Accessways inaccurate maps are to be official Park policy!" (>5)

"Seal Cove Road should not be much better or there will be a lot of traffic using it as a cutoff." (>5)

"I believe that the wider, straighter, and smoother you make roads, the greater number of people you invite to come crowd and jam them. Therefore, whatever plan the Park winds up adopting, don't make bigger, 'finer' roads — let them remain rural Maine basically — except where a bike LANE is added."(>5)

"Please restrict access to the fire roads unless enforcement and maintenance can be provided." "Fire roads for walking and bikes only." (>1)

"Continue to allow vehicles on Duck Brook Road." (>1)

"I especially like the plan to make Duck Brook Road bike access only."

"Seal Cove Road should be maintained by the Park, not jointly by the Park and town, and be improved. Do not believe Tremont would favor any kind of joint maintenance after turning it over to the Park in the late 60's and allowing it to be closed during the winter months. Believe it should still remain closed during the winter months. Efforts to plow and maintain the road in ice-free condition during the winter months would be difficult to say the least."

"As much as I would like to reduce traffic on Otter Cliffs Road, where we own a home, I think making it an 'exit only' access will force even more people onto the Schooner Head section of the Park Loop Road. As it is now, many people park at the end of Otter Cliffs Road or in the picnic area to walk the cliffs to the cobblestone beach, and never travel on the Park Road."

"I believe a further step should be taken by removing signage directing visitors to Bar Harbor via West Street Extension. The access should remain but without any signage. Visitors should be directed to Bar Harbor via the Eagle Lake Road or Rte. 3 and the Visitors' Center."

Biking

"Allow more bike access...restore carriage roads for bike use." (>10)

"Separate the bike riders from the hikers [and horse riders] as much as possible. Require bells on all bikes and require the riders to warn pedestrians they overtake." (>5)

"Encourage early completion of 'carriage road' from Eagle Lake to Sieur de Monts along alignment laid out but never built." (>1)

"I hope there will be some way to get bikes off Lower Mountain Road, or to provide a bike lane — very scary for auto drivers AND bikers." "Get them off Lower Mountain. Rd., especially the 25 MPH curves near Bubble Pond. It is a hazardous place to pass bikers who insist on riding in the center of the auto lane — especially when motorists are more attuned to scenery than driving."(>1)

"Eagle Lake - Sieur de Monts bike path sounds WONDERFUL, but I presume this would be quite an expensive and time-consuming project. Include in the the plan, but spend money on shuttle bus system first."(>1)

"NO [to new bikeway]! Sieur de Monts already too congested. Significant environmental and visual impact! Visible from 47 fire overlook. Must cross busy park road. Steep grades? High construction and maintenance costs. Eagle Lake and Sieur de Monts parking tied up much longer!"

"Provide a bike lane on the loop road permitting cyclists to travel in BOTH directions."

General

"Finally, RV's should be parked permanently and their owners limited to public and/or private transportation."(>10)

"Reduce the number of vehicles." "We need to encourage more walking and hiking and less 'motorizing' around the island..."(>5)

"I believe snowmobiles should be banned or further restricted to using the park...another alternative would be to limit the times snowmobiles could be used. Eg. 10:00 - 4:00 pm."(>5)

"There is not one word in the planning document about snowmobiles, or off-road bicycle use. I oppose both."(>1)

"In summary, the Park Service appears to have failed to realize the excellent potential for use of bicycles and busses (either private or NPS) to provide access to the park, while eliminating other vehicular use. Busses traveling through the Park should have bike racks."

VISITOR SERVICES:

"We do not need another Visitors' Center - the one you have now is a waste of taxpayers money! The Park does not need any more edifices!" "I have never been there when it was too crowded." (>5)

"Agree with larger visitor center with improved handicapped access and year-round use." (>5)

"I disagree with spending money on a new visitors 'center. The existing center could easily be made more accessible as well as adding on more space." (>1)

"I like the idea of having programs available year-round and the former Visitor Center becoming a museum or some such education center. Expanded museum educational programs, nature hikes, and such are important." (>1)

"I would encourage you in whatever plan you finally adopt to do as much as possible to increase the potential for ranger/visitor contact. (Interpreters on busses; conversion of Thunder Hole gift shop to a ranger station; programs; etc.). Visitors are potentially the Park's most dangerous threat; with just a little education they can become a potential steward." (>1)

"Provide more variety in evening campfire programs."(>1)

"I find the interpretive programs are excellent for families. However, I find a lack of programs geared for people already having an advanced knowledge of natural history. Perhaps a few programs a day could focus on an adult audience..."

"Emphasis should be place in interpretive programs on ecological aspects of park habitats, their interconnectedness, and the real fragility of such habitats in areas where development is allowed. We have no evidence of whether the present programs meet these needs nor whether present programs are adequate to serve the needs, Eg. small enough groups. Care should be exercised in the selection of areas for the groups; one year a group was taken into the Great Heath — vegetation suffered."

NATURAL AND CULTURAL RESOURCES:

"There needs to be a stronger emphasis at ANP on maintaining historic resources and inventorying archaeological sites. Carriage roads are not the only historic things on the island or in the Park."

"Cultural resources do not consist of the carriage roads and hiking trails alone. It is too convenient to name those two features continually while the larger questions of cultural resource management and cultural resource interpretation are dodged. The Trustees/founding father story of Eliot Dorr, et.al. needs telling. Historic houses on Baker and at Carroll Farm need planning. The lightkeeper's quarters on Baker should be preserved and interpreted. Our museum collections need care and interpretation. Gatelodges need BASIC preservation: the stones are falling out!"

"The importance of a good baseline study of the Park's various resources can not be given enough stress. Such a study is crucial for determining the extent/source of threats to the Park. Such a study should be a priority, regardless of alternatives. (Establishment of a cooperative research unit with the University of Maine might be worthwhile.)"

"The plan must clearly state, in specific terms, the resource issues which will continue unabated without a change in management philosophy and funding."

"In the consideration of historic resources, Jordan Pond House as an institution should be recognized as a historic resource. This institution pre-dates the park by almost 50 years and provides the visitor a unique and historically significant dining experience."

"I believe some sort of visitor access should be provided to the Jordan Pond and/or Brown Mountain Gate Houses. These buildings are of great interest to the visitor and are historically significant to Acadia's history. These historical buildings should be opened to the public in the form of a museum and shop combination or a limited lodging and food service facilities."

"It is important to preserve the Park itself."

CONCESSIONS:

"Limit concessions in the Park." "A good experience at Acadia does not mean gift shops and snack bars. " (>15)

"I do not believe park space or resources should be committed to concession of any type. With the continuing increases in park visitors, let it be for those who wish to enjoy its uniqueness and beauty. Let those who come to shop do so in other areas." (>10)

"Both Thunder Hole and Cadillac Mountain Gift Shops should be closed and converted to visitor orientation facilities. These shops are not necessary for the enjoyment of Acadia National Park, and they obviously contribute to traffic and parking congestion, as visitors are detained to browse and shop." (>5)

"Eliminate the gift shop atop Cadillac Mountain; people should spend time enjoying the view. There are other suitable spots than there for concessions!"

"Interpretive activities by concessionaires should be considered as supplemental to the park's interpretive program. While I would not necessarily envision formal programs, I would like to provide better interpretive training for concession employees with Park assistance. A coordinated effort between the park and concessionaires can only enhance the service provided visitors."

"It does not appear any useful purpose is being served with the closing of the Thunder Hole shop. To the contrary, visitors will have no available outlet for film, snacks, or other convenience items on the entire Ocean Drive section of the loop road. Visitor contact will be provided only at a substantial cost by providing park personnel to staff the building."

ABBE MUSEUM

"The museum is doing a good job."
"I do not favor enlargement of the Abbe Museum or its maintainment the year around."
"The Abbe Museum should be allowed to expand."
"Support flexibility for Abbe Museum."
"Sure this is needed. But, again, more parking would be needed(!) unless the transportation issue is resolved. If no transportation cure, then don't permit expansion."

There has been a proposal to restore the two former picnic areas on Oak Hill and Pine Hill , both on the west side of the island (see map). These areas were constructed from the 1940 Master Plan but have since been abandoned. Restoration would include upgraded roads, picnic tables and vista clearing. Should they be reestablished or should the areas be left in their current grown over state with only rough fire road access?

118 = Should be reestablished to varying degrees
93 = Should not be reestablished
31 = No response
15 = Maybe should be reestablished

"This does not seem to be in keeping with keeping the West side undeveloped." "In general, do not develop NEW public use areas on the Western side on Mount Desert."(>10)

"There are so many pressing needs within ANP, that projects of this type should only be undertaken where there is clear and present need." (>5)

"Left as is until carriage roads and other amenities are brought up to desirable levels." (>5)

"Clear and improve areas but do not provide roads. Have people hike in with backpack picnics and only provide tables and cleared vistas." "... bike access only." (>5)

"We would favor reestablishing one and seeing how much use it got." (>5)

"Leave in current state. Why spread the risk of fire?" (>1)

"They should be left as they are! We who live on the west side of the island treasure the quiet peace, natural wildness, and lesser congestion of traffic and people. We who were born here or who have chosen to live here would object strenuously to the destruction of what we value. This is a selfish viewpoint, admittedly, but consider this: visitors vary and our offerings should also be varied. Let those who want 'High Society' gravitate to Northeast Harbor; let those who like Bar Harbor's 'honkytonk' summer atmosphere go there; but let us on the west side continue to offer our guests an environment whose value they will share. We already have Pretty Marsh Picnic Area." (>1)

"I think current picnic areas are sufficient. When visiting during peak season we had no problem picnicking. It's an area that is only useful seasonally and might as well be left to grow back to its natural state. Encouraging picnicking brings its own set of problems, more upkeep, more trash, staff to keep the area clean, brings scavengers in, and the local merchants can use the business feeding visitors. Picnics can be left to existing areas or the campgrounds."

❹ **Wildwood Stable currently provides horseback riding and carriage rides along the Park's historic carriage roads, and limited horsecamping, near the stable. There is interest in developing this as an equestrian center for visiting riders and carriage owners and providing overnight accommodations for this group as well as covered box stalls for their horses at Wildwood. Other services that have been suggested for this area are bike rentals, a gift shop, snack bar and horse and carriage boarding. What is your opinion?**

126 = Unqualified No
79 = Mixed response :
    Favoring - Expanded Horse Boarding (**38**) and Bicycle Rentals (**35**)
    Opposing - Gift Shop/Snack Bar (**55**) and Overnight Lodging (**50**)
32 = Unqualified Yes
20 = No response

"I find these services in total contradiction to the goals of the Park Service here at Acadia. Aren't there adequate rentals, eating places and gift shops already? I think so." (>20)

"It seems geared to a specific [elite, privileged, wealthy], small group of people rather than the general visitor. " (>15)

"Good idea to draw some people away from the crowded East side." (>15)

"I would prefer to see Wildwood Stables stay as it is." (>5)

"Bikes and horses don't mix well." (>5)

"To support carriage (and other horse use) on the carriage roads I would encourage the park to enable Wildwood Stables to upgrade sufficiently to provide covered, loose box housing (few modern horses are use to being tied at night) for visiting horses at or close to the present reasonable price. We did our own stable work & brought our own feed, and that is just fine."(>5)

"If Park is already too heavily used, why do something to attract more people?" (>1)

"I am opposed to this ...As a frequent walker of carriage roads I know that the surfaces become loose and choppy when used for horses and carriages. Historically that was their use but now, and in the future, few of us can afford horses and carriages. Please do not commit this important road system to the use of a few."(>1)

"I believe that Wildwood Stable should not be allowed to expand and should be gradually phased out."(>1)

"Gift shop, snack bar and bike rentals are an excellent idea. It would encourage more people to stop and spend time..."

"This is an excellent proposal. Among other things, it would develop a constituency which would support continued maintenance of the carriage road system so tragically neglected in recent years."

"If services such as gift shops and food service are considered for this site, I believe these services should be provided by the Acadia Corporation who has been the sole provider of these services in Acadia since 1932."

"The present dangerous, blind, narrow, curing road bordered by ditch & drop-off, leading from Wildwood Stables to the carriage road system MUST be widened and improved so as to be safe for vehicles going both directions at once, or at least so one can see if anyone is coming the other direction before stating up or down!!! It is an accident waiting to happen!"

⑤ **Both the Park Loop Road and the historic carriage roads were carefully designed, under the guidance of well known landscape architects, to lay gently on the land and to take advantage of the numerous spectacular vistas of mountains, lakes, streams, ocean, islands and the fjord. Many of these vistas, which were integral to the design of these beautiful roads, have become overgrown due to lack of maintenance. Recent research has compiled specific documentation for many of the key vistas. Should the Park selectively remove trees and other vegetation to restore the historic vistas?**

242 = Yes
8 = No
4 = Maybe
3 = No response

"I do believe there is historical justification for some judicial pruning and clearing, and if the work was done in a limited and carefully researched manner — no problem!" (>200)

"No, there is no dearth of beautiful views in Acadia."

⑥ **Other issues on which you would like to comment:**

203 = Further written comments
54 = No response

TRAILS:

"Serious attention should be given to the state of the Park's hiking trails and the development of loops' that would not require vehicles to be spotted at different locations." (>5)

"Trail maintenance has not been adequate... many trails are getting badly overgrown."

"I do not feel old sections of hiking trails should be restored. I was on one of the trail crews that closed some of these old sections, many of which were closed DUE TO EROSION and close proximity of streams, etc. Before looking into opening any trails, reasons should be investigated as to why they were closed in the first place."

CAMPGROUNDS:

"Why haven't campgrounds been addressed?"

"Please keep all overnight and camping facilities out of the Park — for everyone."

HORSES & CARRIAGE ROADS:

"Whatever you do please allow AMPLE use of the facilities for horses — this is the only reason we drive seven hours each way to enjoy the Park!"(>1)

"Horse-drawn carriages or horseback riders should have access to all roads."(>1)

"Carriage Driving is a rapidly growing sport, therefore, I can only encourage you most strongly to incorporate in you planning the use of the Carriage Roads by the carriage drivers for whom they were originally built....To make use of the roads even more enjoyable I suggest the following:

1. The signage could be greatly improved, however the numbered intersections do presently keep one from getting lost if used with the map.

2. The areas used by the sightseeing carriages need surface improvement to keep them firm. Presently they are churned up into loose sand — tiring for a horse to pull through, especially on uphill slopes.
3. It is frustrating to be banned from Eagle Lake and Witch Hole Pond...
4. We found very few places where there was enough space, near water to pull the carriages off the road, unhitch, sponge off the hot horses, tie them and have a picnic lunch...
5. Maps of the Carriage Road system should be available for sale at the stables, both the map booklet showing loops and intersections numbers (addressed to skiers etc.!) and the topographical map. A new topo with numbers would be even better.
6. The Carriage Roads should adapt well to multiple use....However everyone using the Carriage Roads should be made aware of the multiple uses and instructed as to how to behave when meeting or passing each other....I am uncertain about the advisability of wheelchairs and carriages (or flying bicycles) on the same roads.
7. Some of the roads have become so narrow as to preclude carriages passing each other (as along Bubble Pond). These should be brought back to the standard 16 foot width for safety reasons.
8. Mention was made in your study of the possibility of building the one stretch of Carriage Road never constructed, for the use of bicycles. If this is done please consider making it wide enough and opening it to us carriage drivers also."

PLANNING PROCESS:

"I appreciate being able to participate in this survey. Having been to NPS facilities all over the country, I feel Acadia has a human scale and air of amiable comradeship — it's friendly!"

"You are wise to invite our comments. People DO live year-round on MDI, you know, and our viewpoints are important to cooperation between the Park and the surrounding towns. Our ancestors lived here before the Park was created. We possess a unique heritage, which we are happy to share with visitors, BUT, those visitors should not be allowed to destroy what we have to offer."

"As a small Park siting on the upper edge of the Eastern Megalopolis, Acadia will never run out of visitors and I doubt visitation rates will ever drop (unless you experience a Lyme disease epidemic or some other malady!). However, depending on management changes you make, the visitors you attract and their impact on the environment may change. Whole classes of visitor types have been 'eliminated' by virtue of choices made in the past and different classes may be eliminated by future choices — there doesn't seem to be any way around this park management dilemma, no matter which park we manage. After all the studies are done and all the standards are compared, we end up with some crucial subjective choices in front of us which, for better or worse, undeniably determine who will use the park, how they will use it and how many will use it. As a concerned citizen who understands a tiny part of the problems with which you are grappling, I would just say I support the decisions you make from the heart as much as the policy you formulate from hard data. Good luck and thank you for the chance to have my say."

OTHER:

"Enforce littering laws!"(>5)

"Contrary to what has been decided in the past, THE PARK SHOULD BE EXPANDED to include most of the undeveloped parts of the island. Any problem the local towns have with loss of taxable property should be compensated, but at the same time, it should be realized that the remaining private property will increase in value."(>1)

"I support LIMITED use of the Carroll Farm."(>1)

"Missing from all plans is a discussion of how the Park fits into the 'modern' world and how it should respond to events and pressures connected with present society. The Park faces severe threats from pollution of all kinds and should take a leadership role in educating people and even in changing people's habits and lifestyles. Attempting to preserve the Park as an island in a sea of consumption and resultant environmental degradation is bound to eventually fail. The Park needs to take the lead in fighting air pollution by encouraging alternatives to automobiles. The 1st step is obvious: no private cars on Cadillac Mountain. where air pollution has probably the most obvious impact. Take the lead in solving land fill crisis by requiring recycling, particularly of the endless number of Park handouts. Conserve energy in every way possible, and explain it to the visitors. Demonstrate that there is an alternative to eventual energy extraction in and near other national parks and reserves. Attempting to be a passive steward is not enough in these times and of course being a passive steward with 4,000,000 visitors is not possible anyway."(>1)

"I feel that the park and the island as a whole has been over run with cars and RV's. The park is a WALKING PARK. Emphasis should be placed on maintaining the trails and Carriage Roads and vistas for walkers."

"I have a growing concern about the increase in coyotes in the Park."

"Cooperation with towns to protect 'viewsheds' is critical."

"Ferry trips from the island to the mainland portion of the Park should be set up to provide hikers access to the mainland portion of the Park ."

"The last two years we have sensed a growing concern about the increased numbers and decreased quality of our summer 'tourists.' We are getting too many of the 'wrong' kind of people! They should not be encouraged. The 'right' kind of people enjoy MDI's beauty and tranquility without the amusement factor. We're not anti-tourist (have 3 businesses in Mt. Desert) but the tee-shirt crowd will ultimately RUIN this gem."

"I'd rather have my tea and popovers be quaint, than efficient."

APPENDIX D: PARK LOOP ROAD VISTAS

VISTAS

The vistas identified below are shown on the map entitled Vista Study, Park Loop Road in part two of this document.

Vista #16. South Bubble Cliffs.

Vistas #17 and 18. View of the glacial erratic on the near top of the South Bubble. This is known as "The Balanced Rock." No. 18 is a small parking area.

Vistas #19 through 22. The South Bubble, Penobscot Mountain, Jordan Pond and Jordan Cliff, all, roughly, from one end of Jordan Pond to the other end.

Vista #23. View into mixed growth forest from the Jordan Pond House clearing to the junction of Ocean Drive Park Road and Seal Harbor Town Road, all on the East Side Loop Road.

Vista #24. South ridge of Cadillac Mountain across the Hunter's Brooks Valleys.

Vista #25. View into the spruce-fir forest between the State Route 3 overpass of Ocean Drive Park Road and Hunter's Cove Overlook.

Vista #26. View into Hunter's Cove, past Hunter's Cove Head toward the Cranberry Island.

Vista #27. View of Little Hunter's Beach.

Vistas #28 and 29. Across outer Frenchman Bay at Schoodic Point.

Vistas #30 and 31. Seascape eastward towards Otter Point, includes three turn-outs.

Vistas #32 through 41. Views of Otter Cove. #38 and #29 are from the Causeway. #40 is from the Otter Cove Overlook.

Vistas #42 and 43. View from Otter Point.

Vista #44. View from the divided road.

Vista #45. View of the ledges and shore line from the closest approach made by Ocean Drive north of Otter Point.

Vista #46. Views of the ledges, the shore line, Egg Rock, Schoodic Peninsula, outer Frenchman Bay, Great Head and Newport Cove, nearly two miles in length and caused naturally by ledge rock. Any tree growth should be encouraged and retained.

Vista #47. Muskrat Pond and across to Schoodic Point through a natural frame of existing trees on the Schooner Head Road.

Vista #48. South end of Champlain Mountain Cliffs with a close view of a tumbledown and the resultant talus slope.

Vista #49. Champlain Mountain Cliffs and a view of Bliss Field from the Precipice Trail Parking Area.

Vista #50. View of Bliss Field Lowland and flowage including backwater from a beaver dam. A bird wildlife area.

Vista #51. Wide panoramic view of Frenchman Bay and Schoodic Peninsula from Champlain Mountain Overlook.

Vista #52. Beaver Dam Pool.

Vista #53. View across the south expanse of Great Meadow at the Rhodora Are.

Vista #54. View across the center of Great Meadow to the Rhodora Area.

Vista #55. View across the north end of Great Meadow at Rhodora Area and Beaver Flow.

Vista #56. Close view of Beaver Dam and Flow. (Moved North 500'.)

Vista #57. Porcupine Island Overlook from East Side Loop Road, Park Route 4, Kebo Mountain Road. Different view than from Vistas #2 and 3.

Vista #58. View toward Great Hill. Vista #59. View toward Southwest Valley.

Vista #60. Over Bar Harbor at Frenchman Bay Panorama. First parking area.

Vista #61. Panorama of Eagle Lake and Sargent Mountain westerly at Western Mountains, second parking area.

Vista #62. Same as #61 with broader view.

Vista #63. Higher elevation panorama of Frenchman Bay and surroundings. Third and fourth parking areas.

Vista #64. Long view over Penobscot Mountain and out over southern shore and off shore islands towards Isle au Haut.

Vista #65. Northwest view over island to mainland from near top elevation.

Vista #66. Long view towards the north, as Vista #65, but curving from Northwest to Northeast.

Vista #67. Top of Cadillac.

Vista #68. Ship Harbor view from road, not from parking area, straight out over the harbor through the narrow entrance.

Vista #69. Across private land toward the Pretty Marsh.

Vista #70. Anemone Cave Parking Area. Future work.

Due to the type of growth on Cadillac Mountain, no removal of conifers is planned on Vistas #60 through #67.

Bearings and Widths of Clearing																
Vista	Left Side			Width	Right Side				Vista	Left Side			Width	Right Side		
	Degrees				Degrees					Degrees				Degrees		
1	N	70	E	2200'	S	35	E		22	N	35	W	150'	N	65	W
2	S	75	E	165'	S	70	E		23	N	30	W	3200'	S	60	W
3	N	20	W	250'	E	0			24	N	10	E	465'	N	25	E
4	S	70	E	200'	S	45	E		25	S	70	W	2250'	S	45	W
5	S	70	W	450'	N	60	W		26	S	80	W	555'	S	75	W
6	N	40	W	350'	N	0			27	S	65	E	345'	S	65	E
7	N	20	W	285'	N	75	W		28	S	20	W	325'	S	20	E
8	N	25	W	315'	N	85	W		29	S	85	E	375'	S	20	E
9	N	25	W	420'	W	0			30	N	35	E	400'	S	55	E
10	N	65	W	270'	N	70	W		31	N	30	E	425'	S	50	E
11	N	65	W	240'	S	80	W		32	E	0		140'	N	55	E
12	N	70	W	130'	N	80	W		33	S	85	E	390'	S	80	E
13	N	50	W	210'	N	75	W		34	S	50	E	225'	S	60	E
14	N	35	W	185'	S	75	W		35	S	55	E	130'	N	70	E
15	N	75	W	120'	N	80	W		36	S	30	E	70'	N	60	E
16	N	75	W	140'	S	85	W		37	N	75	E	600'	N	60	E
17	W	0		245'	S	65	W		38	S	20	W	1600'	S	15	W
18	N	50	W	75'	N	25	W		39	N	15	E	1500'	N	05	W
19	N	35	W	450'	N	60	W		40	S	45	W	180'	S	20	W
20	N	55	W	2500'	S	40	W		41	S	50	W	160'	N	15	W
21	N	35	W	250'	S	60	W		42	S	30	W	240'	S	20	E

Vista	Left Side			Width	Right Side				Vista	Left Side			Width	Right Side		
	Degrees				Degrees					Degrees				Degrees		
43	S	60	W	100'	S	20	E		58	N	40	W	300'	N	20	E
44	S	40	E	300'	N	20	E		59	W	0		310'	N	0	
45	N	30	E	180'	N	80	E		60	N	30	E	570'	S	50	E
46	N	75	E	1.9 mi	S	75	E		61	S	15	W	370'	W	0	
47	S	65	E	635'	N	60	E		62	N	65	E	370'	N	60	W
48	W	0		250'	W	0			63	S	55	E	550'	N	30	W
49	N	55	E	200'	S	60	E		64	N	15	E	320'	N	70	E
50	S	30	E	275'	S	75	E		65	N	80	W	195'	N	60	W
51	N	10	W	500'	S	0			66	S	10	E	2280'	N	0	
52	S	20	W	750'	S	50	E		67	S	0		180'	S	25	E
53	N	20	W	700'	N	40	W		68	N	35	W	195'	N	20	E
54	S	80	W	1300'	S	65	W		69	N	0		200'	N	70	E
55	N	70	W	280'	S	25	W		70	N	30	W	800'	S	20	E
56	S	70	W	1050'	S	30	W		71	N	40	W	500'	N	20	W
57	S	50	E	420'	N	45	W									

VISTA MANAGEMENT CONSIDERATIONS

The following text and illustrations are excerpted from *Vista Management in Acadia National Park*, by Eckart Lange:

In silviculture there are generally two management concepts used. For vista management even-age management (example vista 4, 6) is not desirable, as e.g. clearcutting causes an unnatural appearance of the managed vegetation. In order to minimize visual impact of the management activities uneven-age management instead should be applied. This requires the periodic removal of trees in several or all size classes within a stand (USDA, Forest Service) and that the trees are evaluated for cutting individually. Therefore the trees within short range of the vista have to be managed steadily in order to achieve and to maintain the design intent of the vista.

Pruning or thinning is not appropriate, as it is too labour-intensive, and also this management type could interfere with the desired natural appearance of the vista. This does not only apply for trees but also for shrubs. Like for trees it is not necessary to prune shrubs as this would be far too labour-intensive. Instead, shrubs should be removed when the desired view is blocked, or even before that.

For groundcover management there are several maintenance possibilities, of which chemicals that can prevent or stop groundcover growth should not be used at all. Mechanical management like mowing is necessary every 2-3 years in order to prevent shrub and tree growth where it is not intended to occurr. Although mulching is becoming more and more popular (e.g., Feucht & Butler 1988) and is also very effective it seems more appropriate in urban or suburban parks than in Acadia's natural landscape.

A 'natural' means of keeping vegetation low is grazing, but it seems questionable whether and how e.g. sheep should be used for that purpose.

In terms of vista design edge treatment is very important. Not only that an abrupt edge is very unsightly, it is very likely to be of less ecological importance as far as edge diversity is concerned.

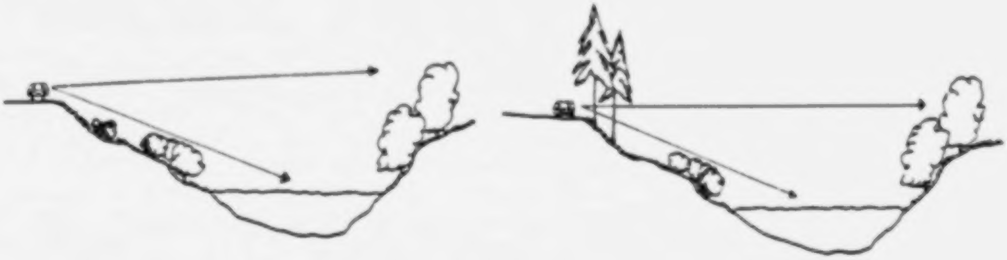
Another design issue is the shape of the area which is held open by management. Straight geometrical shapes should be avoided.

Framed views are often desirable because they bring a variety of forms and scale to the landscape (see also Appleton's theory of prospect and refuge, 1975). Therefore tall specimen next to the road can often be kept, if the observer can look through the stems to the aimed object.

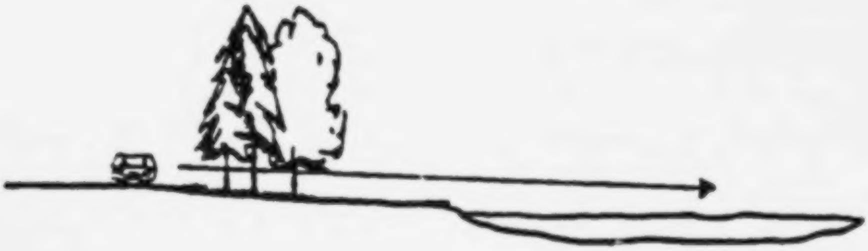
Observer Position

Depending of the position of the observer relative to the observed object, the required management in order to preserve the vista can differ considerably.

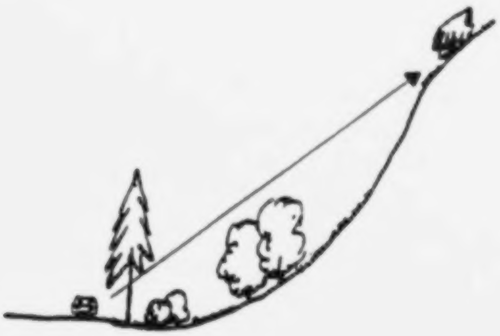
Observer position above: The steeper the slope becomes below the observer, the less attention is normally paid to the details on the ground surface, so that on steep slopes unpleasant areas may not be noticed at all from the visitor.



Observer position level: Hardly any vista in Acadia National Park can be placed in that category. If the observer is at level position either a fairly large open area is required in order to provide for viewing or high stemmed mature trees could also allow the visitor to view through the trees.



Observer position below: As the slope becomes steeper above the observer, more attention is paid to details on the ground surface. An example for this are the views on Bubble Rock.



PLANT LIST

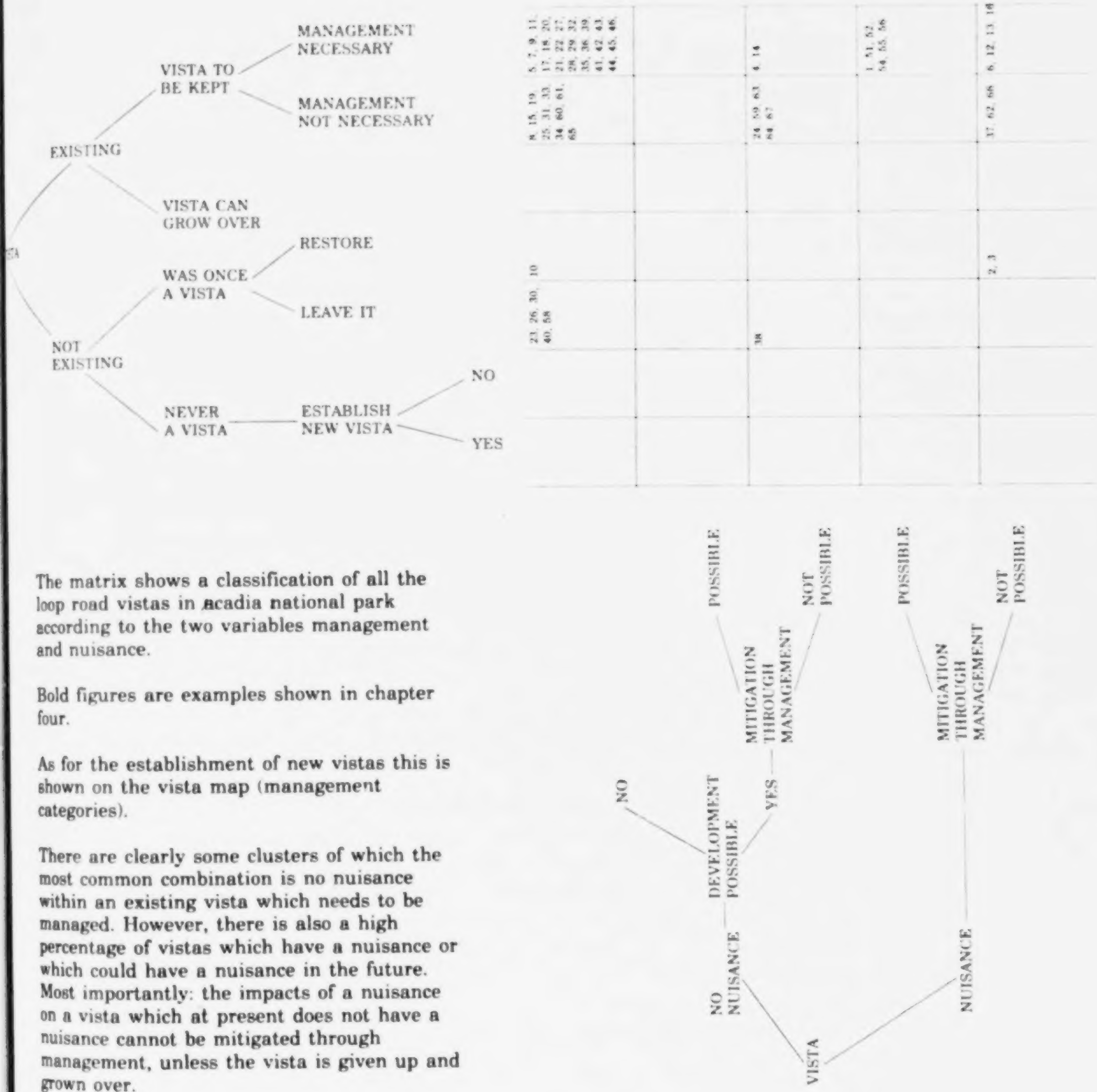
	Land Position					Flood Tolerance					Shade Tolerance					Growth			Longevity			Height				
	wet				dry	low				high	low				high	slow		fast	short		long	<5	<10	<15	<20	>20
Acer pennsylvanicum			X		X		X								X	X				X				X		
Acer rubrum	X	X							X					X			X	X		X						X
Acer saccharinum	X	X							X				X					X	X							
Acer saccharum			X				X								X	X				X						X
Amelanchier canadensis			X				X								X		X			X				X		
Amelanchier laevis			X				X								X		X			X			X			
Betula lenta			X				X						X			X				X					X	
Betula papyrifera			X				X				X						X		X						X	
Cornus alternifolia			X					X							X	X				X			X			
Fagus grandifolia			X			X									X	X					X					X
Fraxinus americana			X	X				X						X			X			X						X
Fraxinus pennsylvanica		X		X					X			X						X		X					X	
Hamamelia virginiana			X				X								X		X			X			X			
Ilex verticillata	X	X								X			X			X			X			X				
Juniperus communis				X	X	X					X					X				X		X				
Kalmia latifolia	X									X					X	X			X			X				
Ostrya virginiana			X			X									X	X				X				X		
Picea glauca			X						X					X		X	X				X				X	
Pinus resinosa				X			X						X				X				X					X
Pinus strobus			X	X			X						X				X				X					X
Prunus serotina				X		X						X						X		X					X	
Prunus virginiana				X			X						X					X		X				X		
Quercus rubra			X	X			X							X			X				X					X
Taxus canadensis			X			X									X	X				X		X				
Tsuga canadensis			X			X									X	X	X				X					X

These native woody plants of Acadia are available in nurseries. According to site conditions and vista intent adequate species should be chosen. (Source: GREENE 1986, HIGHTSHOE 1988)

VISTA DESCRIPTION

Observation Position				Nuisance			Dominating Element				Vista
Vista	Above	Level	Below	Yes	No	Poss	Coast	Lake	Mount	Other	Lost
1	X			X		X	X			Ferry	
2	X			X		X				Town	
3	X			X		X				Town	
4	X	X	X		X	X	X		X		
5		X			X				X		
6	X			X		X				Town	
7			X		X				X		
8		X	X		X				X	Bog	
9		X	X		X				X	Bog	
10											X
11		X	X		X			X	X		
12	X			X		X	X				
13	X			X		X	X				
14	X				X	X	X			Bog	
15			X		X				X		
16		X		X		X				Bog	
17	X				X		X				
18	X				X		X				
19	X				X		X				
20	X				X		X				
21	X				X		X				
22	X				X		X				
23											X
24			X		X	X		X	X		
25	X				X		X				
26											X
27	X				X		X				
28	X				X		X				
29	X				X		X				
30	X				X		X				
31	X				X		X				
32	X				X		X				
33	X				X		X				
34	X				X		X				

VISTA DESCRIPTION											
Observation Position				**Nuisance**			**Dominating Element**				**Vista**
Vista	**Above**	**Level**	**Below**	**Yes**	**No**	**Poss**	**Coast**	**Lake**	**Mount**	**Other**	**Lost**
35	X				X		X				
36	X				X		X				
37	X			X		X	X				
38											X
39	X	X	X		X				X		
40											X
41	X				X			X	X		
42	X				X			X	X		
43	X				X			X	X		
44	X				X			X	X		
45			X		X				X	Erratic	
46			X		X				X	Erratic	
47	X	X	X		X				X		
48	X				X			X			
49	X				X			X			
50	X				X			X			
51	X			X				X			
52	X			X				X			
53	X				X			X			
54	X			X		X		X			
55	X			X		X		X			
56	X			X		X		X			
57	X	X			X			X			
58											X
59	X				X	X	X			Town	
60	X		X		X		X		X	Town	
61	X				X		X	X	X		
62	X			X		X	X	X	X		
63	X				X	X	X			Town	
64	X				X	X	X			Town	
65	X				X		X	X	X		
66	X			X		X	X	X	X		
67	X				X	X	X			Town	


MANAGEMENT NECESSARY
VISTA TO BE KEPT
MANAGEMENT NOT NECESSARY
EXISTING
VISTA CAN GROW OVER
RESTORE
WAS ONCE A VISTA
LEAVE IT
NOT EXISTING
NO
NEVER A VISTA
ESTABLISH NEW VISTA
YES
5, 7, 9, 11, 17, 18, 20, 21, 22, 27, 28, 29, 32, 35, 36, 39, 41, 42, 43, 44, 45, 46
4, 14
1, 51, 52, 54, 55, 56
6, 12, 13, 16
8, 15, 19, 25, 31, 33, 34, 60, 61, 65
24, 59, 63, 64, 67
37, 62, 66
10
2, 3
23, 26, 30, 40, 58
38
POSSIBLE
NOT POSSIBLE
POSSIBLE
NOT POSSIBLE
MITIGATION THROUGH MANAGEMENT
MITIGATION THROUGH MANAGEMENT
NO
DEVELOPMENT POSSIBLE
YES
NO NUISANCE
NUISANCE
VISTA

The matrix shows a classification of all the loop road vistas in acadia national park according to the two variables management and nuisance.

Bold figures are examples shown in chapter four.

As for the establishment of new vistas this is shown on the vista map (management categories).

There are clearly some clusters of which the most common combination is no nuisance within an existing vista which needs to be managed. However, there is also a high percentage of vistas which have a nuisance or which could have a nuisance in the future. Most importantly: the impacts of a nuisance on a vista which at present does not have a nuisance cannot be mitigated through management, unless the vista is given up and grown over.

APPENDIX E: CARRIAGE ROAD RESTORATION, MAINTENANCE, AND USE

Based on *Recommended Guidelines for the Restoration, Maintenance, and Use of the Carriage Roads at Acadia Natonal Park* (Riely and Associates 1989)

1. CARRIAGE ROAD RESTORATION

A plan for the restoration of the carriage roads must begin with a detailed analysis of the existing conditions. Where they exist, the original construction documents should be consulted. Field control points should be located to establish vertical and horizontal control relative to the original datum points. These points were set by Rockefeller's engineering crews at the time of the original construction, and are still extant. They should be used as the basis for an existing conditions survey of the section identified for restoration. Each section will be surveyed, and base maps prepared showing existing elevations at the same locations as those shown on the original drawings. From this information comparative plan and profile sheets should be prepared. These base sheets would also be useful in recording problems and failures in the road structure, drainage system, retaining and breast walls or coping stones. These sheets could also be used to plot the location and limits of vista clearing and roadside cleaning. In addition, the work area should be thoroughly documented with photographs, recording the existing condition for a historic record prior to any reconstruction work.

Once the base maps have been prepared and the problem areas identified, restoration design documents will be prepared to fully describe the work. These should include plan and profile sheets, typical cross-sections, estimates of quantities of materials, and specifications. These plans should be as complete and as carefully prepared as the original plans. The original design should guide the restoration work, although modern equipment and specification nomenclature should be typical cross-sections, estimates of quantities of materials, and specifications. These plans should be as complete and as carefully prepared as the original plans. The original design should guide the restoration work, although modern equipment and specification nomenclature should be employed in the preparation of construction documents. Plans for the restoration of Beatrix Farrand's planting designs may also be prepared with this base information in hand. While each of these plans will specifically indicate the necessary reconstruction, some of the issues that will be encountered will include the following:

Drainage

The proper functioning of the drainage system is absolutely essential to the long-term preservation of the carriage roads. The fact that the roads have remained in as good condition as they have is a testament to the original design and construction of the drainage system. However, the drainage system has begun to fail in many places. There is a need for reconstruction of many portions of the drainage system, and a critical need for a higher level of maintenance, which will be discussed in the following section. An example of how maintenance and reconstruction is linked is that of concentrated runoff being diverted to the road surface. As vegetation has grown up in the ditch-lines and culverts have silted in, runoff has been diverted across the road surface in many places, with very damaging results. Figures J. and J-l. illustrate the results of unchecked woody vegetation which has caught leaves and other debris, forming a dam in the ditch-line, and diverting runoff into the roadway, which then washed out the road surface and middle course of stone to the foundation stones. Inadequate drainage maintenance, in this case, has caused a condition which will require reconstruction of both the drainage gutters and the road itself. Proper restoration and maintenance of the drainage system will prevent this kind of destruction of the carriage roads.

Ditches Or Gutters

Runoff should be determined by hydrologic calculations. Reconstruction plans would then indicate any areas in which the existing ditch section is inadequate to carry runoff from a 10 year (10%) storm. Either the ditch section or the spacing of culverts would be adjusted to assure adequate drainage. The original trapezoidal ditch shape may be efficiently reconstructed by bolting a wing attachment of the correct shape to the blade of a motor grader. Where stone-lined gutters exist, these must be repaired by hand. Where the ditch-lines have shown erosion, stone lining should be included in the restoration work. Because of the high quality of the original design and construction, the great majority of the work will be in restoring the drainage system to its original condition, rather then in adding new structures.

Stone Culverts

The original culverts were either stone or iron pipe, where clearance was insufficient for stone. The stone culverts were very well built and are in generally good condition. Some reconstruction and repair work, however, will be required, particularly at the head walls of the stone culverts. This work should be undertaken only by a mason qualified in restoration of historic stone structures, after careful analysis of the particular structure. Unlike the roads and bridges, there are no design drawings for the stone culverts. These were designed "on the ground" by the engineer. Similarly, culvert headwall reconstruction plans can most efficiently be produced by notations on photographic, diazo reproducible images, rather then with measured drawings. Any replacement stones must be carefully selected to match the existing stone in color and character. Mortar must be designed to match the existing, with consideration being given to its appearance after weathering for several years.

Metal Culverts

Many of the metal culverts have rusted out and failed (Figure L.). Some of these have been replaced with corrugated metal pipe. In several locations, this pipe protrudes out of the ground with no flared end-section or end-wall as originally specified. When metal pipes are replaced, consideration should be given to replacing them with concrete pipe. Concrete pipe will not rust, it is smooth, like the original metal pipe, and the ends should in any case be obscured by inlet basins, head walls, or in some cases, where a headwall would be out of view from the carriage road or any adjacent trail, by flared end sections. This pipe should be a minimum of 12 inches in diameter (or larger as determined by hydrologic calculations for a 10 year storm), properly bedded in gravel, and laid true to grade with a laser-level. Any section of the road which requires major repair, such as the replacement of foundation stones, should have all of the metal pipes replaced while this work is underway to prevent future disturbance of the road bed.

In the great majority of cases, the pipe locations should replicate those of the existing pipe. Changes should only be made where it is clearly necessary – for instance, where erosion is occurring at the outlet of the pipe, or water is standing in the ditch-line. These conditions are quite rare, because the original drainage system was so well designed and constructed. Great care must be exercised in the design of reconstructed drainage system elements to assure their consistency with the original design and construction techniques.

Roadway Restoration

The amount of reconstruction of the roadway itself will vary widely throughout the carriage road system. Some sections of the road are in almost as good condition as when they were built. Some of them are so deteriorated that they are in need of major reconstruction. One of the most important considerations in the restoration of the carriage roads is in working toward the proper cross-section of the road.

Crown And Superelevation

These carriage roads were constructed with an ample crown of 6 to 8 inches, for the sixteen-foot roads – a slope of 3/4 inch in 1 foot to 1 inch in 1 foot. This crown has been substantially lost on much of the carriage road mileage. In most cases, this is probably the result of stone in the middle of the road having gravitated toward the edges of the road, thereby reducing the crown. If the proper crown remains on the foundation layer of stones, as designed, the road may be regraded to restore the crown.

In some instances the road is superelevation of the roads, reference should be made to the vertical profiles prepared by the engineers of the road. Park Service files contain plan and profile drawings of much of the carriage road system. Bench marks, for vertical control, are still extant adjacent to the roads in many locations. By following the gradients and vertical curves of the original road, the long, smooth transitions in grade may be preserved or restored as the work progresses.

Foundation Stones (Lower Course Of Macadam)

In some locations, the foundation stones themselves must be replaced. When this is the case, after the centerline has been established and recorded with off-set stakes, the stones should be removed to the sub-grade, the sub-grade regraded to the required crown (1 inch per foot), the sub-grade rolled with a vibratory roller to 100% compaction (Standard Proctor), and new foundation stones installed. The compacted sub-grade should be set at 12 inches lower than the finished elevation. The foundation stones will compress to approximately 70% of their loose depth. This is, 10 inches of foundation stones will measure 7 inches after rolling. Additional foundation stones may be obtained, when required, from what is known locally as "blown ledge." This is broken, blasted ledge rock, quite similar to that used in the original construction, and locally available. From this material, stones which are larger than 6 inches in any dimension, or larger than 4 inches in smallest dimension, should be discarded or broken. These stones should be spread on the sub-grade to depth of 10 inches and rolled with a vibratory roller. It is important that both the subgrade and the foundation stones conform with the crown, or camber, of the final road cross-section.

Middle Layer (Upper Course Of Macadam)

Upon the foundation stones, and filling the interstices between them, would spread 4 inches of smaller stones. This stone would meet ASTM grading C (100% passing a 2" sieve and a maximum of 5% passing a 1/2" sieve). Then, shape to proper crown or superelevation, roll again to 100% compaction. The 4 inches of stone will roll to approximately 3 inches. Care should be taken to conform to the lines and grades established in the restoration plans (based upon the original construction drawings, where available). The middle layer of stone can be most effectively installed with a tailgate paver such as the Layton Track Paver (Figure M.). The Park currently has such a paver. When completed, the foundation and middle layers should equal 10 inches in depth, after compaction.

Surface And Binder Course

The surface and binder layers of the road should be reconstructed on most of the carriage roads. The original hard, smooth layer of the road's surface has been almost completely lost. The original clay binder would have had to have been periodically replaced to maintain the cementing necessary to maintain this surface. This, of course, has not been done. The cohesion has been lost and the surface has become one of loose gravel.

Because of the temporary nature and high maintenance required to preserve the road's surface with the original surface mixture, variations which will restore the original appearance and utility, but will require less up keep should be tested.

This surface layer could be constructed of granite or trap rock "crusher dust" mixed with a binder of soil cement or cementitious limestone screenings. The composition of the crusher dust, by weight, would be as follows:

100% to pass a 1/2" screen
25% to be retained on a 1/8" screen
12% to pass a #200 sieve

The composition of the soil cement would be:

4 parts clay
1 part Portland cement

The crusher dust is to be thoroughly mixed with the soil cement at a ratio of 10 parts crusher dust to 1 part soil cement. If limestone screenings are substituted for the soil cement, common agricultural grade limestone may be used at the same 10 to 1 ratio as the soil cement.

This surface mixture, like the middle course of stone, should be applied with a paving machine such as the Layton Track Paver.

Great care must be taken in the transport and application of the material to avoid segregation of the various sizes of aggregate. The spreader box should be kept at least one-half full at all times to prevent segregation of the materials.

After application, the material is to be wetted with mixture of water and dust retardant, and rolled 100% compaction with a vibratory roller. The original road crown profile was a parabolic curve; however, this shape is very difficult to construct and maintain with modern construction equipment. It is suggested, therefore, to build the reconstructed sections with two simple incline sections joined by a 4 foot rounded section in the middle. While the original crown was 8 inches, later drawings of the road cross-sections, current use and experience suggest that 6 inch crown would be sufficient for drainage and more suitable for bicyclists and walkers.

An alternate additive to the crusher dust surface course would be the application of asphalt emulsion (CSS-1) to the surface mixture at a rate of 2½%, by weight. This mixture has been used successfully on modern macadam roads in Linn County, Iowa. This would ideally be mixed in an asphalt plant, where the emulsion can be thoroughly mixed with the dried stone in a "pug mill" mixer. The operation could most economically be performed at the beginning or ending of the asphalt plant season. This emulsion, unlike hot plant-mix bituminous concrete, does not rely on heat to liquify the cementing agent. For this reason the plant may be employed for this work when it is not in use for bituminous concrete production. The material may then be stock piled at the Park until the next construction season. This low percentage asphalt emulsion does not alter the appearance of the stone surface course, but it will greatly increase its durability, and reduce dust and maintenance. The application method would be the same as for the soil cement or limestone binder alternative.

A fourth alternative would be to install the surface course of stone with no additional binder. If properly installed, and periodically maintained, this surface should give perfectly satisfactory results. While slightly cheaper in initial installation, added maintenance cost and continued dust nuisance should also be considered as a part of the long-term cost of this surface. With any of the four compositions it is important to assure that the surface course (after rolling) is kept to approximately 2 inches in depth (± 1/2"). Too great a depth of surface course will make the road retain moisture, and will lead to accelerated deterioration of the road.

Depth Layers

Layer	Loose Depth	Compacted Depth
Foundation Stones	10	7"
Middle Layer	4	3"
Surface Layer	2-1/2	2"
Total		12"

Rolling

As noted above, each of the three course of the broken-stone road must be sprinkled and rolled. The rolling should begin at the shoulders, roll longitudinally, and work toward the center. Rolling in this way prevents pushing the crown out of line or flattening it. Careful rolling is essential to obtain a good shape to the road surface. It is also important to assure that water which falls on the road will drain off the road surface rather than through it, which will saturate the sub-grade and accelerate the deterioration of the road.

After compaction and solidification using any of the compositions outlined above, the road surface will replicate the original road surface. It will be hard, smooth, and water-tight, as a proper broken-stone road should be. Bicycles and house-drawn vehicles have been segregated on the carriage roads due to the difficulty of bicycle riding over the roads which have been dedicated to horse traffic. If the roads are properly restored and maintained, this will not be a problem. The hard, smooth surface obtained will be perfectly suitable for bicycles, horses and carriages.

Coping Stones

A remarkable and distinguishing feature of the roads is the use of coping stones along the edges of the road on steep fill section or at the top of retaining walls. Most of these large stones have remained where they were placed; however, a significant number have become dislodged and have shifted from their original locations. Some of these have tumbled down the slopes they were intended to mark. These stones were set by drilling indentations on each side of the stones. Into these indentations the teeth of stone tongs, or "dogs" were set, and the stones lifted into place with a derrick. The carved depressions can still be seen on the stones. The Park still has some of the old tongs in its possession. These tongs, a small truck-mounted crane, and a knowledgeable crew, could re-set the displaced stones.

In areas in which the roadway is to undergo restoration, the coping stones should be numbered and removed from the roadway, and reset after the road surface has been replaced, in their original positions. Attention must be paid, during both restoration and maintenance, to assuring positive drainage through the coping stones. The development of a ridge in front of the coping stones, diverting drainage over the road surface, has had damaging results in many places on the carriage roads.

Vista Clearing

Since vista clearing has been deferred for many years on the carriage roads, the scale of the undertaking to recapture this essential element of the roads has become one more in keeping with restoration than of maintenance. While some of the important views were documented in the Vista Study (Figure 6), it is important to state that these views represent only a charting of important views described in written documents. The carriage roads were designed to take advantage of hundreds of sweeping and dramatic views of the lakes, mountains, bay and ocean.

The carriage roads were carefully designed to follow the shoulders of the mountains, affording views of the surrounding scenery, but avoiding the crests of the mountains, where they would become a part of the views. Today, however, most of these views have grown in. The fact that one is generally enveloped in a tunnel of vegetation when on the carriage roads does not increase their appeal as a destination for Park visitors. An aggressive and effective vista clearing program is an essential element in any effort to increase visitor use of these roads.

The location, limits, and techniques for vista restoration must be as carefully considered as other elements of the carriage road restoration. It is essential to reopen, as soon as possible, the documented vistas as well as the views from many of the bridges. The clearing from the bridges would serve two functions. One is to open views from the bridge, the other is to allow better views of the bridges themselves. On many of the bridges, turnouts were designed to afford prospects of the bridges. In many cases these views are now completely obscured by trees.

This is not to say that all of the trees in a certain view shed should be cut. Great care was taken to save handsome trees in the original construction of the carriage roads, bridges and gate lodges. The relative importance of vegetation and views must be balanced within the context of an overall design for a sequence of views of varying character. Vista clearing designs should be developed and used as a guide for establishment and maintenance of important views over the years. All vista plans and on-site decisions should be made with the assistance of Park Service landscape architects.

The maintenance of the vistas on the carriage roads may be aided by the selective removal of plants, favoring sun-loving shrubs such as sweet fern and rhodora. Once established, these plants will shade the ground and retard the development of non-tolerant pioneer tree species, while remaining low enough to permit views over.

The importance of keeping the vistas open was emphasized in 1988 by landscape architect Charles W. Eliot, II, author sixty years earlier of *The Future of Mount Desert Island*. He wrote:

> The tree growth – with no forest fires since 1947 – is changing the island and Park from Champlain's "Isle de Monts Deserts" – the hills kept bare by the forest fires set by the Indians to foster the berry crops – to the "Island of Wooded Hills." Since we certainly do not want and must prevent and fight any forest fire, we will have to cut the trees blocking those views.

Planting Restoration

One significant attribute of the carriage roads which was substantially lost in the 1949 fire was the planting done on the recommendation of Beatrix Farrand. She was a well-known and respected landscape architect and longtime resident of Mount Desert Island. It was her advice Rockefeller sought when planting design was needed to knit the new roads back into the landscape. She, like Rockefeller, was meticulous in her attention to detail and their correspondence (with her accompanying notes) documents a carefully planned, extensive planting design which framed important views, provided a setting for the gate lodges and bridges, and enhanced the experience of travelling along the roads. Since sufficient information is available to recreate this planting, restoration is recommended for two reasons: First, the planting was the final step in Rockefeller's plan for the development of the carriage road system, and its implementation was the crowning touch. Second, Beatrix Farrand's work continues to play an important role in the history and development of landscape architecture as a profession. Her work at Acadia is the only example of her talent as it was applied in a national park setting. If this restoration is undertaken, it is suggested that first priority be given to the bridge planing plans.

2. MAINTENANCE

Present Condition

The present condition of the carriage roads is very different from their original and intended site. The binder has eroded away, the crown has been lost, vegetation is growing in the ditch-lines, and in some cases the drainage system has failed to the point where water now runs down the surface of the road, exposing the foundation stones. Coping stones have been lost. Vistas have grown over. Much of the carriage road system is in need of reconstruction more than it is of repair. Once the carriage roads have been restored, it is essential that an adequate level of maintenance be undertaken to preserve them in an attractive and serviceable condition. In the areas where restoration cannot be undertaken at once, it is even more imperative that the roads be maintained to prevent further deterioration. An adequate maintenance program will include attention to the following concerns:

Ditches

One of the most pressing, and fortunately easiest to accomplish, tasks is that of cleaning and shaping the ditch lines. The ditches (or "gutters", as they were described in the specifications) should be kept clean and free of woody vegetation. Cleaning and shaping the ditch-lines with a motor grader where woody vegetation is becoming established, would be the most cost-effective method. Once properly shaped, hand pruning of the woody vegetation in the ditches would be sufficient for several years, allowing the grass and mosses to grow. Removal of woody vegetation in stone-lined ditches must be accomplished by hand. In this case, the vegetation should be cut close to the ground, rather then pulled, to avoid damage to the stone work. The use of safe and N.P.S. approved herbicides could assist greatly in controlling woody vegetation which sprouts from the roots after being cut.

Care should be taken to conform to the original profile of the ditch-line. Many of the ditches were designed as a trapezoidal section, with a one-foot flat section on the bottom of the ditch. Because the hydrologic characteristics of a trapezoidal ditch is different from a "V" ditch (i.e., the water runs slower and causes less erosion in a trapezoidal ditch), this type of ditch should be restored and retained. A custom blade can be fitted on a motor grader which will form the typical trapezoidal ditch, as originally designed. After reshaping, the ditch-lines should be seeded with grass (shade tolerant varieties, where necessary).

Culverts And Catch Basins

Both stone and metal culverts should be kept free of silt and accumulated vegetation, as should the catch basins at the inlet of culverts. This routine maintenance should be scheduled to occur twice per year – ideally once during the spring or early summer, and once during the autumn, after the majority of leaves have fallen from the deciduous trees.

While the manual labor of cleaning culverts and catch basins can be accomplished by seasonal labor forces, each crew should contain one maintenance employee knowledgeable about the drainage system, including outlet protection, ditch lining, and stone culvert construction, so that the entire drainage system can be inspected during the routine maintenance.

The original culverts were either stone or iron pipe. The stone culverts were very well built and are in generally good condition. Some repair work, however, will be required, particularly at the head walls of the stone culverts. This work should be undertaken as part of restoration, rather then maintenance, work.

As previously reported, many of the metal culverts have rusted out. Some of these have been replaced with corrugated metal pipe. In several locations, this pipe protrudes out of the ground with no flared end-section or end-wall as specified. These pipes should be replaced as a part of the restoration work. When this work must be done in advance of the restoration work, consideration should be given to replacing the deteriorated metal pipes with concrete pipe. The concrete pipe is smooth, like the original metal pipe, and the ends should in any case be obscured by inlet basins, head walls, or in some cases, by flared end sections. This pipe should be a minimum of 12 inches in diameter (or larger as determined by hydrologic calculations for a 10 year storm), properly bedded in gravel, and laid true to grade with a laser-level.

During routine maintenance all metal pipes should be checked at the outlet end to see if drainage is following a path under, rather then through, the pipe. This indicates pipe failure, and the pipe should be replaced. Any section of the road which requires major repair, such as the replacement of foundation stones, should have all of the pipes replaced while this work is underway to prevent future disturbance of the road bed.

Stone catch basins were originally placed at the inlet of most of the culverts. These functioned by collecting debris and natural litter. Most of these catch basins, which were originally typically 18 inches deep, have largely silted in. These should be cleaned out at least once per year to guard against future siltation of the pipes.

Crown And Superelevation

Maintenance was clearly a concern in the original design of the carriage roads. In relation to the crown of the road, Baker wrote, "With a broken-stone road, the method of making repairs has more weight in determining the amount of the crown than in the case of either an earth road or a gravel road." A road which is built with relatively low crown (e.g., 1/2 inch per foot) required "the system of continuous repairs" whereas a steeper crown (e.g., 1 inch per foot) may be maintained "periodically".

As established in the previous sections, these carriage roads were constructed with a crown of 6 to 8 inches, for the sixteen-foot roads – a slope of 3/4 inch in 1 foot to 1 inch in 1 foot. After restoration of the proper foundation, middle and surface layers of the road, this crown (or superelevation for the banked curves) may be maintained by annual grading of the surface layer, pulling the material which has migrated to the edges back to the center, smoothing, sprinkling, and rolling. As is the case with new construction or restoration, the rolling should begin at the edges of the road and work to the middle. The road should always be sprinkled with water, or a mixture of water and dust retardant prior to rolling, with a 3-5 ton vibratory roller.

If the proper crown remains on the foundation layer of stones, as designed, the road may be regraded to restore the crown.

In sections where the middle layer of stone has migrated to the surface, presenting a rough surface which becomes loose or "ravels," this may be alleviated by the application of a thin layer of surface material (as specified in the Restoration section) filling all depressions, sprinkling, and thorough rolling with a vibratory roller. The best time to accomplish this work is in the early spring, after the frost has gone out of the ground.

Routine maintenance will be required after the new surface has been repaired. Horse dung, vegetation, and loose dust must be removed from the road surface periodically. If allowed to stand on the road, they will eventually soften the road surface and cause deterioration of the road. Horse manure should be scraped to the edge of the road and removed from there periodically.

Coping Stones

A remarkable and distinguishing feature of the roads built by John D. Rockefeller, Jr. is the use of coping stones along the edges of the road on steep fill sections or at the top of retaining walls.

Most of these large stones have remained where they were placed; however, a significant number have become dislodge and have shifted from their original locations. Some of these have tumbled down the slopes they were intended to mark. In areas where the restoration work will be minor, or where it must be deferred for several years, these stones should be replaced. Using the method described in the Restoration section, employing the old stone "dogs" in conjunction with a modern small truck-mounted crane, a knowledgeable crew could replace the displaced coping stones, redressing one of the most obvious signs of disrepair on the carriage roads.

Dust Control

Broken-stone roads, particular if they suffer from a lack of proper maintenance, are by nature dusty. This is no more than a nuisance for a single carriage travelling along the roads because most of the dust is left in its wake. It is a more serious problem, however, when carriage/buckboards are run in groups because it raises the level of dust and therefore creates an annoyance and health hazard for both people and horses. While getting dusty is certainly part of the experience of being on the carriage roads, an excessive amount can also limit the enjoyment of visitors who choose to take a buckboard ride while at the Park.

The traditional method of dealing with this problem was by sprinkling the roads with water. Using proper materials for the surface of the carriage roads and correct grading and compacting the surface will in help control the dust, as will limiting the use of vehicles with rubber tire. The destruction of broken-stone roads by rubber tires results from the suction of the rubber tires which draws out the binding material and causes the surface to disintegrate.

In areas where the roads will be used heavily, however, the use of a dust palliative or retardant could be considered. Retardants such as calcium and sodium chloride should not be used – they are soil mobile salts which absorb moisture, and are harmful to both plants and stone bridges. There are also some fears that they contaminate both surface and groundwater and their use has been greatly curtailed. Some dust retardants, though, are environmentally safe if they are designed to be non-leaching. In other words, after dilution with either fresh or salt water, they are non-toxic upon application.

Such retardants work by binding together the fine particles of the road surface to prevent them from saltating, or being put in motion by the action of the wind relatively close to ground surface. It is saltation and mechanical disturbances such as traffic which suspend the soil particles or, in other words, make a road dusty.

The balance of fine and coarse particles provides the cohesiveness necessary to resist saltation and the effects of wheels. Generally, two applications of a dust retardant will compact road surfaces so that traffic can move at normal speeds without stirring up dust.

Application rates and procedures vary from site to site. For example, steep grades or tight curves would require a different technique. Once the area to be treated is studied to determine the correct rate and procedure, equipment needs are assessed. Generally, a water truck, with minor modifications, can be used to apply the retardant. Additional equipment will be necessary to prepare the surface before the application of the retardant and to compact it afterwards. The top 2 inches of the road need to be in a loose, moist condition. The loosening is usually accomplished by blade-grading and shaping the road; a water wagon could supply the moisture necessary to hold the dust retardant and encourage compaction. The use of a vibratory roller would then be employed to compact the surface.

Under normal circumstances, manufacturers indicate that the first treatment will be effective for 6 to 10 months, and every treatment thereafter for approximately one year. If undisturbed by traffic, the initial application could last as long as three years.

Vista Maintenance

The first step in establishing a program for vista clearing and maintenance is determining the important vistas which need to be maintained and/or enhanced. A plan for the carriage roads is a good place to start. Both Rockefeller and Simpson had a keen understanding of how to align roads with the topography to take advantage of scenic views; and they applied their knowledge as the carriage roads on Mount Desert Island were laid out. Studying the topography and the alignment of the roads gives a clear indication of where vistas were planned. Many of these, as noted, are documented in the correspondence between Rockefeller and the Simpsons, and also with Farrand. The documented vistas discovered in the correspondence are shown on Figure 5; however, it should be stressed that these are not the only planned views or important opportunities for vistas. It is significant that several of the carriage roads were designed to occupy the shoulders of the mountains so that fine views might be obtained from these heights. If dense vegetation obscures these, the intention of the original location is lost.

Once these vistas are re-established, the key to maintaining them is vigilance. An annual inspection would provide the opportunity to note encroaching vegetation and make plans for its removal before it becomes overgrown and therefore more difficult to eliminate. Removal of trees, but retention of sun-loving shrubs which do not obscure the vistas, will retard the invasion of pioneer tree species. Routinely removing underbrush and seedlings from designated vistas would thus prove efficient in the expenditure of both manpower and money. In several instances the location selected for the carriage roads has aided in vista maintenance. Some roads were designed to pass the up-hill side of large flat outcrops on which very little vegetation grows (e.g., Asticou-Jordan Pond Road on south side of Faint Hill). In these locations, very little additional vista clearing is necessary to maintain important views.

While much of the maintenance work needed on the carriage roads must be done in a relatively warm time of the year, vista clearing and maintenance can be effectively accomplished in the winter. When the leaves are off of the trees it is easier to see the opportunities for vistas. In addition, the noise of the necessary chain saws and chippers will disturb the solitude of fewer visitors at that time of the year. All brush and small limbs should be chipped and left as mulch.

Roadside Cleaning

The roadside, like the roadway itself, must be recognized, as Rockefeller suggested, to represent a cultural element in the landscape, with both artistic and natural components. While the hand of man should be employed with restraint and sensitivity to the natural setting, a roadside aspect of "standing and down dead timber" gives the visitor the impression of neglect more than of pristine nature. Dead timer should be cut and removed for a distance of at least 100 feet from the edge of the roads. In addition these historical and aesthetic reasons for roadside cleanup, this maintenance activity will also serve to act as an important fire-break for fires in the understory.

Work Force

Maintenance of the carriage roads is a highly specialized area of preservation. It requires a knowledge of the construction of broken-stone roads, including proper crown, depths of the layers of stone, surface compaction and appearance, drainage system design and function, as well as skill in techniques of their upkeep. One person on a motor grader who does not understand the proper cross-section of a broken stone road can do untold damage in a very short time. It is important for the work force to know the locations of the stone lined ditches and the culverts. They should also have a knowledge of the vista locations and extent. For all these reasons, there should be specially qualified crew who must demonstrate a knowledge of the unique maintenance and conservation issues regarding the carriage roads prior to assignment on them. Personnel who gain experience in the restoration of some of the roads would have an excellent background to continue with their care.

3. APPROPRIATE CARRIAGE ROAD USE

Carriages

When Rockefeller built the carriage road system, he envisioned its use by those who enjoyed both the social and the sporting aspects of carriage driving. He anticipated that the sport of carriage driving would increase in popularity. Carriage-driving, however, never developed the popularity Rockefeller and others expected. Nevertheless, carriage clubs still exist. Many continue to enjoy the sport and would relish the opportunity to take advantage of an uninterrupted, 51 mile system of carriage roads. The popularity of the current carriage concession is an indication that many visitors enjoy the opportunity to experience the carriage roads by carriage. Since the roads were specifically designed for this purpose, accommodating this use seems appropriate once the roads have been fully restored and sufficient ongoing maintenance is in place.

If the carriage roads are to be used as Rockefeller intended, the vehicles would range in size from single horse buggies to small buckboards (2 to 4 benches instead of 6 as currently provided by the concessioner). With such usage *on properly restored and maintained roads*, there need be no limit on the length, duration or sequence of carriage rides.

The current concession provides daily buckboard and haywagon trips including a ride to the summit of Day Mountain for the sunset. Haywagons with rubber tires should not be allowed. Their inappropriate appearance, coupled with the destructive nature of rubber tires on broken stone roads, make them undesirable.

Park naturalists accompany two trips on the carriage roads as part of an interpretive program. Controlling the dust on these excursions is one the primary difficulties. With large vehicles, one behind the other, even with the control measures, those visitors in the second and third conveyances are often uncomfortable. Such large groups also present problems for the Park naturalist trying to speak as the carriage ride progresses. With the interpreter in the first buckboard, communication in the last haywagon is limited. This is not the way the carriage roads were meant to be experienced.

A better approach would be to hold an interpretive session at Wildwood Farm before the carriage rides leave. The Park naturalist could explain briefly the history of the roads and the nature of their development, and describe the bridges, gate lodges and other points of interest to be seen along the way. With this introduction and perhaps a pamphlet including additional information, visitors would be well-informed about the experience ahead. In addition, carriage drivers, if properly trained, could answer questions and highlight each of the important stops. A Park naturalist could also be stationed at one or both gate lodges to answer questions.

Particularly if carriage clubs are to be encouraged to use the carriage road system, accommodations are needed for parking vehicles, harnessing and boarding horses for those who would be interested in using their own horses and carriage on the roads.

Bicycling

In 1949, John D. Rockefeller, Jr., observing that the roads were little used for their original purpose, wrote to Newton B. Drury, the Director of the National Park Service, about the possibility of using the carriage roads at Acadia for bicycling. Drury replied that Park Landscape Architect Benjamin Breeze had made a study nine years earlier of the adaptability of the carriage roads to bicycle use. Breeze had observed that the roads were, indeed, quite suitable for bicycles.

Since that time, bicycling has dramatically increased as a recreational activity. Bicycle technology has greatly advanced since that time. Shops in Bar Harbor and Northeast Harbor rent ten-speed bicycles. The most popular bicycles used on the carriage roads are "trail" bikes. While bikes with extremely knobby tires can damage the road surface, bikes outfitted with only slightly knobby tires, as are currently used on rental bikes, seem to do little damage to the road surface. Fast-moving, rubber-tired vehicles are anathema to broken-stone roads. The relatively narrow width of bicycle tires, however, make them much less of a threat to the road surface than automobile or truck tires. The hardest and smoothest tires will do the least damage to the road surface.

Another great advantage of touring the carriage roads by bicycle is that of rate of travel. Because of the width of the road, the sequence of views and relatively long distances of the loops, walking the carriage roads strikes some as tedious. The speed of bicycle, however, is much more like that of a carriage behind a jogging horse. The scale and sequence of vistas and features is ideally suited to this rate of movement. The width of the roads allow bicyclists to ride side by side, and to pass other bicyclists, pedestrians, equestrians, or carriages without discomfort or danger.

Bicycling represents the most harmonious, accessible, and cost effective use of the carriage roads today. While the economics of scale limit the routes and flexibility of carriage and buckboard passengers, bicyclists may choose their route, and explore the carriage roads at their own pace. While the Park automobile roads become choked with visitors each season, the carriage roads remain relatively deserted. If properly restored and actively promoted, the use of these roads by bicyclists could help to relieve the pressure on the automobile roads and greatly enhance the visitors' experience.

Wheelchairs

The carriage roads, if properly restored, offer an exceptional opportunity for people confined to wheelchairs to experience the extensive and varied scenery of the interior of Acadia National

Park. Most of the carriage roads were designed at a gradient of less than 5%, which is comfortably negotiated by most wheelchair users. Some sections as steep as 7% may be appealing to those looking for a more challenging route. The width of the carriage roads make possible the safe use of them by wheelchair users in conjunction with bicyclists, equestrians, pedestrians and carriages. The beautiful scenery, great extent, diverse users, and historic significance combine to make the carriage road system a wonderful recreational possibility for those confined to wheelchairs. This use is predicated, however, upon the restoration of the surface of the roads to a smooth, hard condition which is suitable for wheelchairs.

Snowmobiles

A short section of the carriage roads along the east side of Eagle Lake is now open to snowmobiles for access to the Park Loop Road. This is a reasonable variance to the general prohibition of motorized vehicles on the carriage roads, but should not be extended to any other sections of the carriage roads.

Cross-country Skiing

Cross-country skiing offers the most appealing winter activity on the carriage roads (Figure W.). These roads are considered ideal for this use by many cross-country skiers. The width of the roads, beautiful views – especially striking in the winter, absence of motor vehicles and gentle gradients make a cross-country skiing outing on the carriage roads particularly delightful. This activity is wholly appropriate for the carriage roads, and it encourages use of the Park during a season in which visitors may enjoy the grandeur of the island without the crowds encountered during the summer. The only deterrent to use of the carriage roads by large numbers of cross-county skiers is a somewhat unpredictable snow cover condition during the winter months. In spite of this, the winter use of the Park and cross-country skiing on the carriage roads, in particular, is growing and is expected to continue to do so.

Walking/hiking

As mentioned above, the scale and distances of the carriage roads do not make them the most appealing routes for many walkers. For many, however, these broad, smooth surfaces, free of motor vehicles, offer a fine alternative to the more arduous hiking trails in the Park. These roads have great appeal for older people, for groups of children who require supervision, for handicapped people, or anyone for whom a leisurely stroll has more attraction than a challenging hike. In addition, some visitors find the carriage roads a wonderful setting for running or jogging. The multiple use of these roads by bicyclists, carriages, equestrians and pedestrians should cause little conflict (if the road surface is restored and maintained), and may even be perceived as an attraction because of the variety and animation which does not occur on the walking trails.

Dog Sleds

The carriage roads have been used in the winter and summer (using sleds on wheels) for dog sleds. Considering the low use of the carriage roads in the winter, the fact that the activity is nonmotorized, and the general compatibility with other winter users, this use seems reasonable and acceptable. The summer use of the carriage roads for "wheeled" dog sled teams could cause conflicts with other users in the summer. As the carriage road use increases, the compatibility of dog sled teams with bicycling, carriages, and pedestrians should be carefully monitored. If conflicts arise, deference must be given to carriage and bicycle users which represent the most appropriate and numerous users of this resource.

APPENDIX F: STAFFING REQUIREMENTS, ALTERNATIVES 1-4

Based on similar situations, these kinds of staff increases could be anticipated.

Table F-1: Anticipated Staffing, Alternative 1

Position	Grade	FTEs
Management:		
1 Superintendent	GS-14	1.0
1 Deputy Superintendent	GS-12	1.0
1 Secretary	GS-7	1.0
Administration:		
1 Administrative Officer	GS-11	1.0
1 Personnel Officer (currently GS-7 Personnel Specialist)	GS-9	1.0
* 1 Personnel Clerk	GS-5	1.0
* 1 Payroll Clerk	GS-5	1.0
1 Purchasing Agent (currently GS-7)	GS-9	1.0
* 1 Property Clerk/Receiving Officer	GS-7	1.0
1 Budget Officer (currently GS-6 Budget Assistant)	GS-9	1.0
* 1 Budget Clerk	GS-6	1.0
* 1 Administrative Technician	GS-6	1.0
1 Clerk Typist	GS-4	1.0
* 1 Clerk Typist	GS-4	1.0
		1.0
Resource Management (Natural):		
1 Natural Resource Specialist (increase grade)	GS-12	1.0
* 1 Research Ecologist	GS-11	1.0
1 Natural Resource Specialist	GS-9	1.0
* 1 Natural Resource Specialist	GS-9	1.0
* 1 Bio Tech (1/2 year)	GS-7	1.0
* 1 Bio Tech	GS-5	1.0
Resource Management (Cultural):		
* 1 Cultural Resources Manager	GS-12	1.0
* 1 Cultural Landscape Specialist	GS-11	1.0
* 1 Curator	GS-9	1.0
* 1 Museum Tech	GS-7	1.0
* 1 Museum Tech	GS-5	1.0
* 1 Park Guide	GS-4	1.0

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*Additional position required under this alternative.

Interpretation:			
1	Chief Interpreter (increase grade)	GS-12	1.0
1	Supervisory Park Ranger	GS-9	1.0
* 1	Interpretive Specialist	GS-9	1.0
* 1	Volunteer Coordinator	GS-9	0.7
1	Visitor Center Supervisor	GS-7	0.7
* 1	Visitor Center Assistant Supervisor	GS-6	0.6
1	Park Ranger (Environmental Education/Outreach)	GS-7	0.8
* 1	Park Ranger	GS-6	0.7
* 2	Park Rangers (Phone/Mail Info, Office Mgmt.)	GS-5	1.6
* 1	Graphics/Media Specialist	GS-5	1.0
13	Park Rangers	GS-4/5	6.1
* 7	Park Rangers	GS-4/5	3.3
* 2	Park Rangers	GS-3	0.5
Visitor & Resource Protection, Fee Collection & Fire Management:			
1	Chief Ranger (increase grade)	GS-12	1.0
2	Supervisory (District) Park Rangers	GS-9	2.0
1	Fire Management Officer	GS-9	1.0
* 1	Concessions Specialist	GS-9	1.0
1	Supervisory (Staff) Park Ranger	GS-7	0.9
1	Supervisory Ranger (Law Enforcement)	GS-7	1.0
* 2	Supervisory Rangers (Law Enforcement)	GS-7	1.8
1	Supervisory Ranger (Fee Collection)	GS-7	0.9
1	Park Ranger (Fire Control Officer)	GS-7	0.9
1	Lead Park Ranger	GS-7	0.7
13	Park Rangers (Law Enforcement)	GS-5	6.1
* 6	Park Rangers (Law Enforcement)	GS-5	3.0
4	Park Rangers (General)	GS-5	2.2
20	Park Rangers (General)	GS-4	8.0
2	Lead Lifeguards	GS-5	0.4
* 4	Lifeguards	GS-5	1.0
4	Lifeguards	GS-4	0.8
1	Forestry Technician	GS-5	0.3
5	Forest Technicians	GS-4	1.5
1	Fire Control Aid	GS-5	0.5
2	Fire Control Aids	GS-4	1.0
1	Fire Management Clerk	GS-4	0.5
* 1	Clerk/typist	GS-5	1.0
* 2	Dispatchers	GS-4	1.0
* 4	Fee Collectors	GS-4	2.0

Maintenance:

1	Maintenance Management General Foreman (increase FTE)	WG-13	1.0
1	Electrician (increase FTE)	WG-10	1.0
1	Buildings and Utilities Foreman	WG-9	1.0
1	Plumber (increase FTE)	WG-10	1.0
1	Roads Foreman	WG-9	1.0
1	Heavy Mobile Equipment Mechanic	WG-10	1.0
2	Carpenters (increase FTE)	WG-9	2.0
1	Painter (increase FTE)	WG-9	1.0
* 1	Painter	WG-9	1.0
2	Engineering Equipment Operators	WG-8	2.0
1	Boat Operator	WG-9	1.0
1	Maintenance Management Technician	GS-7	1.0
1	Janitor	WG-5	1.0
1	Mechanic	WG-8	1.0
1	Motor Vehicle Operator	WG-8	0.5
1	Motor Vehicle Operator	WG-7	0.5
3	Maintenance Workers	WG-5	0.9
1	Laborer	WG-5	0.5
* 3	Laborers	WG-5	2.0
17	Laborers	WG-3	5.5
* 9	Laborers	WG-3	7.0
* 8	Laborers	WG-2	4.8
4	Laborers	WG-1	1.6
* 3	Maintenance Workers	WG-9	3.0
* 1	Mason	WG-10	0.6
* 2	Preservation Workers	WG-9	1.0
* 1	Trails Foreman	WG-5	1.0
* 2	Work Leaders	WG-2	1.2
* 2	Sign Makers	WG-9	2.0
* 2	Custodians	WG-5	0.6

Planning and Lands Management:

* 1	Park Planner	GS-11	1.0
* 1	Park Ranger (Easement Monitoring)	GS-7	1.0

Table F-2: Anticipated Staffing, Alternative 2

Position	Grade	FTE
Management:	GS-14	1.0
1 Superintendent	GS-12	1.0
1 Deputy Superintendent	GS-7	1.0
1 Secretary		
Administration:		
1 Administrative Officer	GS-11	1.0
1 Personnel Officer (currently GS-7 Personnel Specialist)	GS-9	1.0
* 1 Personnel Clerk		
1 Purchasing Agent (currently GS-7)	GS-6	1.0
1 Budget Officer (currently GS-6 Budget Assistant)	GS-9	1.0
* 1 Administrative Technician	GS-9	1.0
1 Clerk Typist	GS-6	1.0
* 1 Clerk Typist	GS-4	1.0
	GS-4	1.0
Resource Management (Natural):		
1 Natural Resource Specialist (increase grade)	GS-12	1.0
* 1 Research Ecologist	GS-11	1.0
1 Natural Resource Specialist	GS-9	1.0
* 1 Natural Resource Specialist	GS-9	1.0
* 2 Bio Techs	GS-7	2.0
* 2 Bio Techs	GS-5	2.0
Resource Management (Cultural):		
* 1 Cultural Resources Manager	GS-11	1.0
* 1 Curator	GS-9	1.0
* 1 Museum Tech	GS-5	1.0
* 1 Park Guide	GS-4	0.6
Interpretation:		
1 Chief Interpreter (increase grade)	GS-12	1.0
1 Supervisory Park Ranger	GS-9	1.0
1 Interpretive Specialist	GS-9	1.0
* 1 Volunteer Coordinator	GS-9	1.0
1 Visitor Center Supervisor	GS-7	0.7
1 Visitor Center Assistant Supervisor	GS-6	0.6
1 Park Ranger (Environmental Education/Outreach)	GS-7	0.8
1 Park Ranger	GS-6	0.7
* 2 Interp. Assistants (Mail/Phone Info.)	GS-5	1.6
* 1 Graphics/Media Specialist	GS-5	1.0
16 Park Rangers	GS-5	8.5
5 Park Rangers	GS-4	1.9
2 Park Rangers	GS-3	0.6

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*Additional positions required under this alternative.

Visitor & Resource Protection, Fee Collection, and Fire Managment:

1	Chief Ranger (increase grade)	GS-12	1.0
2	Supervisory (District) Park Rangers	GS-9	2.0
1	Fire Management Officer	GS-9	1.0
1	Supervisory (Staff) Park Ranger	GS-7	0.9
1	Supervisory Ranger (Law Enforcement)	GS-7	1.0
* 2	Supervisory Rangers (Law Enforcement)	GS-7	1.8
1	Supervisory Ranger (Fee Collection)	GS-7	0.9
1	Park Ranger (Fire Control Officer)	GS-7	0.9
1	Lead Park Ranger	GS-7	0.7
13	Park Rangers (Law Enforcement)	GS-5	6.1
* 6	Park Rangers (Law Enforcement)	GS-5	3.0
4	Park Rangers (General)	GS-5	2.2
20	Park Rangers (General)	GS-4	8.0
2	Lead Lifeguards	GS-5	0.4
* 4	Lifeguards	GS-5	1.0
4	Lifeguards	GS-4	0.8
1	Forestry Technician	GS-5	0.3
5	Forestry Technicians	GS-4	1.5
1	Fire Control Aid	GS-5	0.5
2	Fire Control Aids	GS-4	1.0
1	Fire Management Clerk	GS-4	0.5
* 1	Clerk/typist	GS-5	1.0
* 2	Dispatchers	GS-4	1.0
* 6	Fee Collectors	GS-4	3.0

Maintenance:

1	Chief of Maintenance (increase FTE)	GS-12	1.0
1	Electrician (increase FTE)	WG-10	1.0
1	Buildings and Utilities Foreman	WS-9	1.0
1	Plumber (increase FTE)	WG-10	1.0
1	Automotive Mechanic Foreman	WG-9	1.0
1	Heavy Mobile Equipment Mechanic	WG-10	1.0
2	Carpenters	WG-9	1.7
1	Painter (increase FTE)	WG-9	1.0
* 1	Painter	WG-9	0.7
2	Engineering Equipment Operators	WG-8	2.0
1	Boat Operator	WG-9	1.0
1	Maintenance Management Technician	GS-7	1.0
1	Janitor	WG-5	1.0
1	Mechanic	WG-8	1.0
1	Motor Vehicle Operator	WG-8	0.5
3	Maintenance Workers	WG-5	0.9
1	Laborer	WG-5	0.5
17	Laborers	WG-3	5.5
* 9	Laborers	WG-3	7.0
* 8	Laborers	WG-2	4.8
4	Laborers	WG-1	1.6
* 3	Maintenance Workers	WG-9	3.0
* 1	Mason	WG-10	0.6
* 1	Preservation Worker	WG-9	0.5
* 1	Trails Foreman	WG-5	1.0
* 2	Work Leaders	WG-2	1.2
* 2	Sign Makers	WG-9	2.0
* 2	Custodians	WG-5	0.6

Planning and Lands Management:		
* 1 Park Planner	GS-11	1.0
* 1 Park Ranger (Easement Monitoring)	GS-7	1.0

Table F-3: Anticipated Staffing, Alternative 3

Position	Grade	FTE
Management:	GS-14	1.0
1 Superintendent	GS-12	1.0
1 Deputy Superintendent	GS-7	1.0
1 Secretary		
Administration:		
1 Administrative Officer	GS-11	1.0
1 Personnel Officer (currently GS-7 Personnel Assistant)	GS-9	1.0
* 1 Personnel Clerk		1.0
* 1 Payroll Clerk	GS-5	1.0
1 Purchasing Agent (currently GS-7)	GS-5	1.0
* 1 Property Clerk/Receiving Officer	GS-9	1.0
1 Budget Officer (currently GS-6 Budget Assistant)	GS-7	1.0
* 1 Budget Clerk	GS-9	1.0
* 1 Administrative Technician	GS-6	1.0
1 Clerk Typist	GS-6	1.0
* 1 Clerk Typist	GS-4	1.0
	GS-4	1.0
Resource Management (Natural):		
1 Natural Resource Specialist (increase grade)	GS-12	1.0
1 Natural Resource Specialist	GS-9	1.0
* 1 Natural Resource Specialist	GS-9	1.0
1 Bio Tech	GS-7	0.5
Resource Management (Cultural):	GS-9	1.0
* 1 Curator		
Interpretation:		
1 Chief Interpreter (increase grade)	GS-12	1.0
1 Supervisory Park Ranger	GS-9	1.0
* 1 Interpretive Specialist	GS-9	1.0
1 Visitor Center Supervisor	GS-7	0.7
* 2 Interp. Assistants (Phone/Mail Info.)	GS-5	1.7
* 1 Graphics/Media Specialist	GS-5	1.0
* 1 Visitor Center Assistant Supervisor	GS-5	0.6
1 Park Ranger (Environmental Education/Outreach)	GS-7	0.8
5 Park Rangers	GS-5	2.1
* 7 Park Rangers	GS-5	3.6
* 11 Park Rangers	GS-4	5.5
8 Park Rangers	GS-4	4.0

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*Additional positions required under this alternative.

Visitor & Resource Protection, Fee Collection, and Fire Management:

1	Chief Ranger (increase grade)	GS-12	1.0
2	Supervisory (District) Park Rangers	GS-9	2.0
1	Fire Management Officer	GS-9	1.0
1	Supervisory (Staff) Park Ranger	GS-7	0.9
1	Supervisory Ranger (Law Enforcement)	GS-7	1.0
* 2	Supervisory Rangers (Law Enforcement)	GS-7	1.8
1	Supervisory Ranger (Fee Collection)	GS-7	0.9
1	Park Ranger (Fire Control Officer)	GS-7	0.9
1	Lead Park Ranger	GS-7	0.7
13	Park Rangers (Law Enforcement)	GS-5	6.1
* 3	Park Rangers (Law Enforcement)	GS-5	1.5
4	Park Rangers (General)	GS-5	2.2
20	Park Rangers (General	GS-4	8.0
2	Lead Lifeguards	GS-5	0.4
* 2	Lifeguards	GS-5	0.5
4	Lifeguards	GS-4	0.8
1	Forestry Technician	GS-5	0.3
5	Forestry Technicians	GS-4	1.5
1	Fire Control Aid	GS-5	0.5
2	Fire Control Aids	GS-4	1.0
1	Fire Management Clerk	GS-4	0.5
* 1	Clerk	GS-5	0.5
* 1	Dispatcher	GS-4	0.5
* 2	Fee Collectors	GS-4	1.0

Maintenance:

1	Chief of Maintenance (increase FTE)	WS-12	1.0
1	Electrician (increase FTE)	WG-10	1.0
1	Buildings and Utilities Foreman	WS-9	1.0
1	Plumber (increase FTE)	WG-10	1.0
1	Automotive Mechanic Foreman	WS-9	1.0
1	Heavy Mobile Equipment Mechanic	WG-10	1.0
2	Carpenters	WG-9	1.3
1	Painter	WG-9	1.0
* 1	Volunteer Coordinator	GS-9	0.7
2	Engineering Equipment Operators	WG-8	2.0
1	Boat Operator	WG-9	1.0
1	Maintenance Management Technician	GS-7	1.0
1	Janitor	WG-5	1.0
1	Mechanic	WG-8	0.5
1	Motor Vehicle Operator	WG-8	0.5
1	Motor Vehicle Operator	WG-7	0.5
3	Maintenance Workers	WW-5	0.9
1	Laborer	WG-5	0.5
9	Laborers	WG-3	2.7
10	Laborers	WG-2	3.0
* 3	Maintenance Workers	WG-9	3.0
* 1	Mason	WG-10	0.6
* 2	Preservation Workers	WG-9	1.0
* 1	Trails Foreman	WG-5	1.0
* 2	Work Leaders	WG-2	1.2
* 2	Sign Makers	WG-9	2.0
* 2	Custodians	WG-5	0.6

Planning and Lands Management:

* 1	Park Ranger (Easement Monitoring)	GS-7	1.0

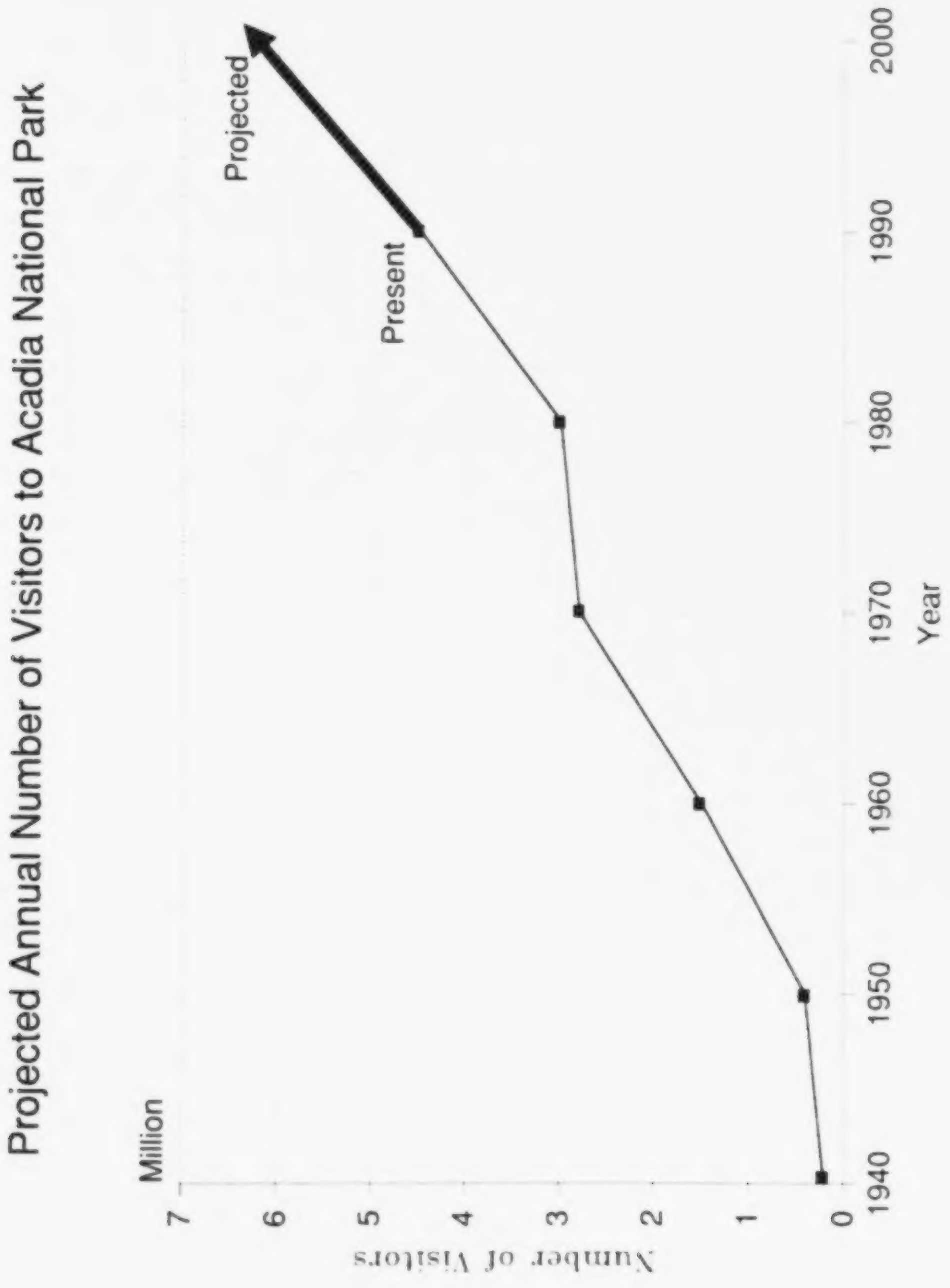
Table F-4: Anticipated Staffing, Alternative 4

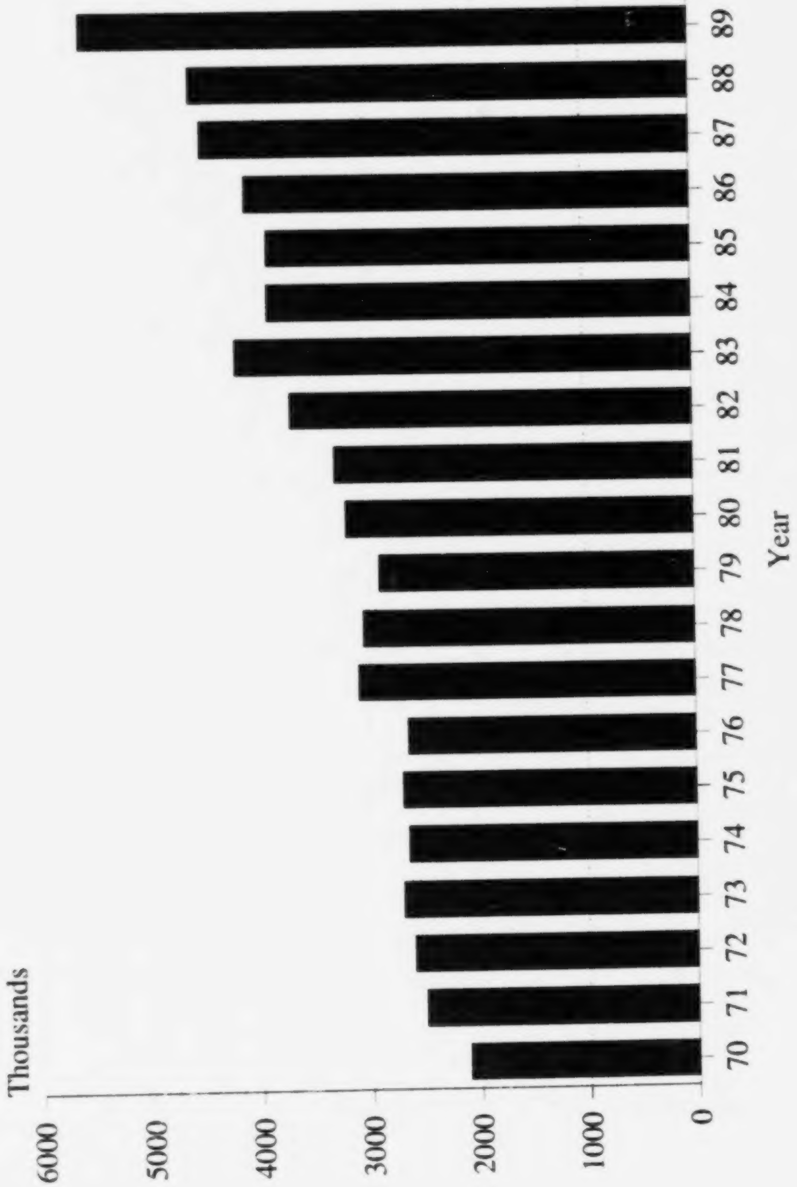
Position	Grade	FTE
Management:		
1 Superintendent	GS-14	1.0
1 Deputy Superintendent	GS-12	1.0
1 Secretary	GS-7	1.0
Administration:		
1 Administrative Officer	GS-7	1.0
1 Personnel Specialist	GS-9	1.0
1 Purchasing Agent	GS-7	1.0
1 Budget Assistant	GS-6	1.0
1 Clerk Typist	GS-4	1.0
Resource Management (Natural):		
1 Supervisory Biologist	GS-12	1.0
1 Biologist	GS-9	1.0
1 Bio Tech	GS-7	1.0
Resource Management (Cultural):		
No staff		
Maintenance:		
1 Chief of Maintenance	GS-12	0.8
1 Electrician	WG-10	0.9
1 Buildings and Utilities Foreman	WS-9	1.0
1 Plumber	WG-10	0.9
1 Roads Foreman	WS-9	1.0
1 Heavy Mobile Equipment Mechanic	WG-10	1.0
2 Carpenters	WG-9	1.3
1 Painter	WG-9	1.0
2 Engineering Equipment Operators	WG-8	2.0
1 Boat Operator	WG-9	1.0
1 Maintenance Management Technician	GS-7	1.0
1 Maintenance Worker	WG-5	1.0
1 Mechanic	WG-8	0.4
1 Equipment Operator	WG-8	0.4
2 Motor Vehicle Operators	WG-7	0.8
3 Maintenance Workers	WW-5	1.2
23 Laborers	WG-3	9.2
3 Laborers	WG-2	1.2
Interpretation:		
1 Chief Interpreter	GS-11	1.0
1 Supervisory Park Ranger	GS-9	1.0
1 Visitor Center Supervisor	GS-7	0.7
1 Park Ranger (Environmental Education/Outreach)	GS-7	0.8
5 Park Rangers	GS-5	2.1
8 Park Rangers	GS-4	4.0

Visitor & Resource Protection, Fee Collection, and Fire Management:

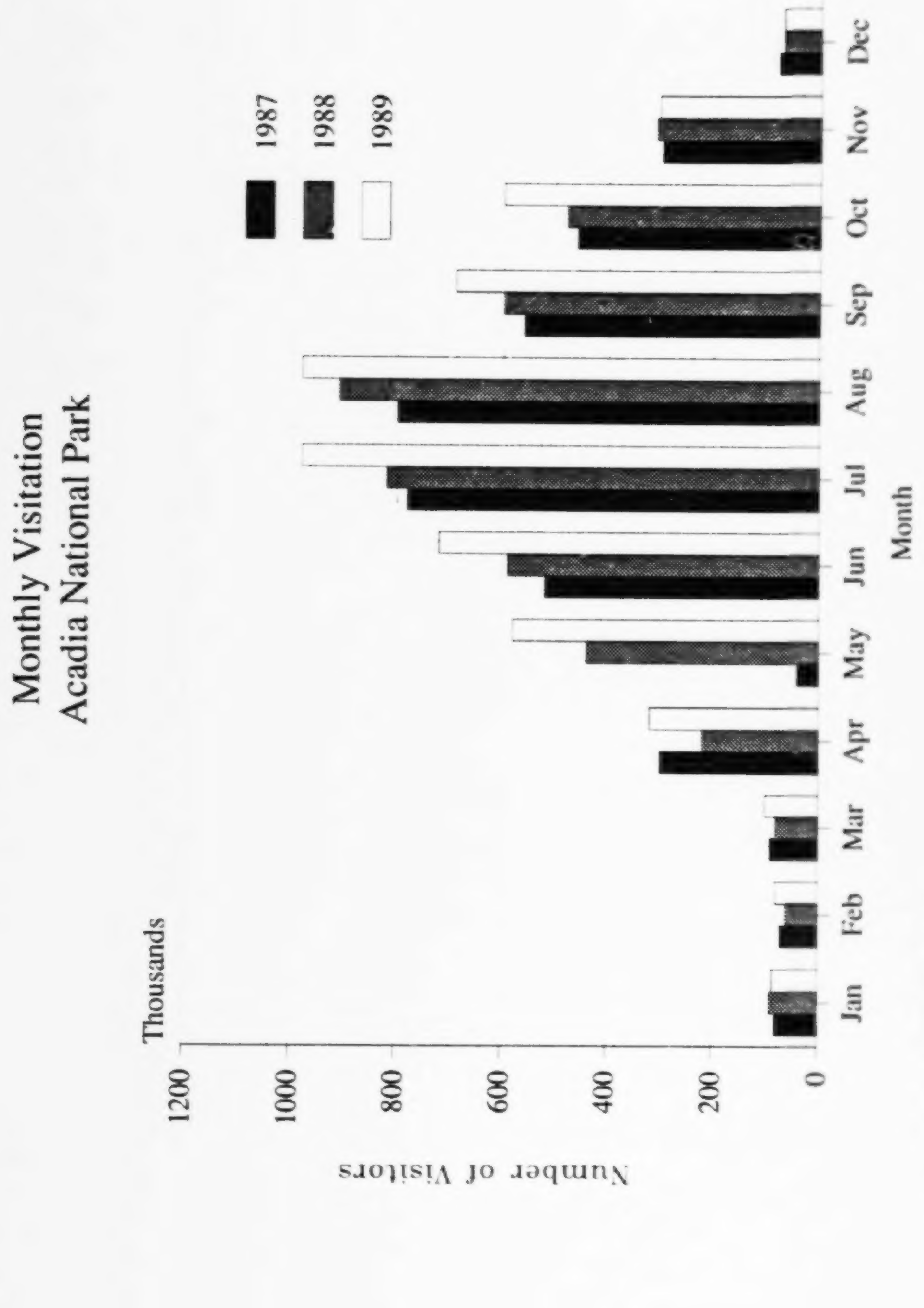
1	Chief Ranger	GS-11	1.0
2	Supervisory (District) Park Rangers	GS-9	2.0
1	Fire Management Officer	GS-9	1.0
1	Supervisory (Staff) Park Ranger	GS-7	0.9
1	Supervisory Ranger (Law Enforcement)	GS-7	1.0
1	Supervisory Ranger (Fee Collection)	GS-7	0.9
1	Park Ranger (Fire Control Officer)	GS-7	0.9
1	Lead Park Ranger	GS-7	0.7
13	Park Rangers (Law Enforcement)	GS-5	6.1
4	Park Rangers (General)	GS-5	2.2
20	Park Rangers (General	GS-4	8.0
2	Lead Lifeguards	GS-5	0.4
4	Lifeguards	GS-4	0.8
1	Forestry Technician	GS-5	0.3
5	Forestry Technicians	GS-4	1.5
1	Fire Control Aid	GS-5	0.5
2	Fire Control Aids	GS-4	1.0
1	Fire Management Clerk	GS-4	0.5

APPENDIX G: VISITOR USE



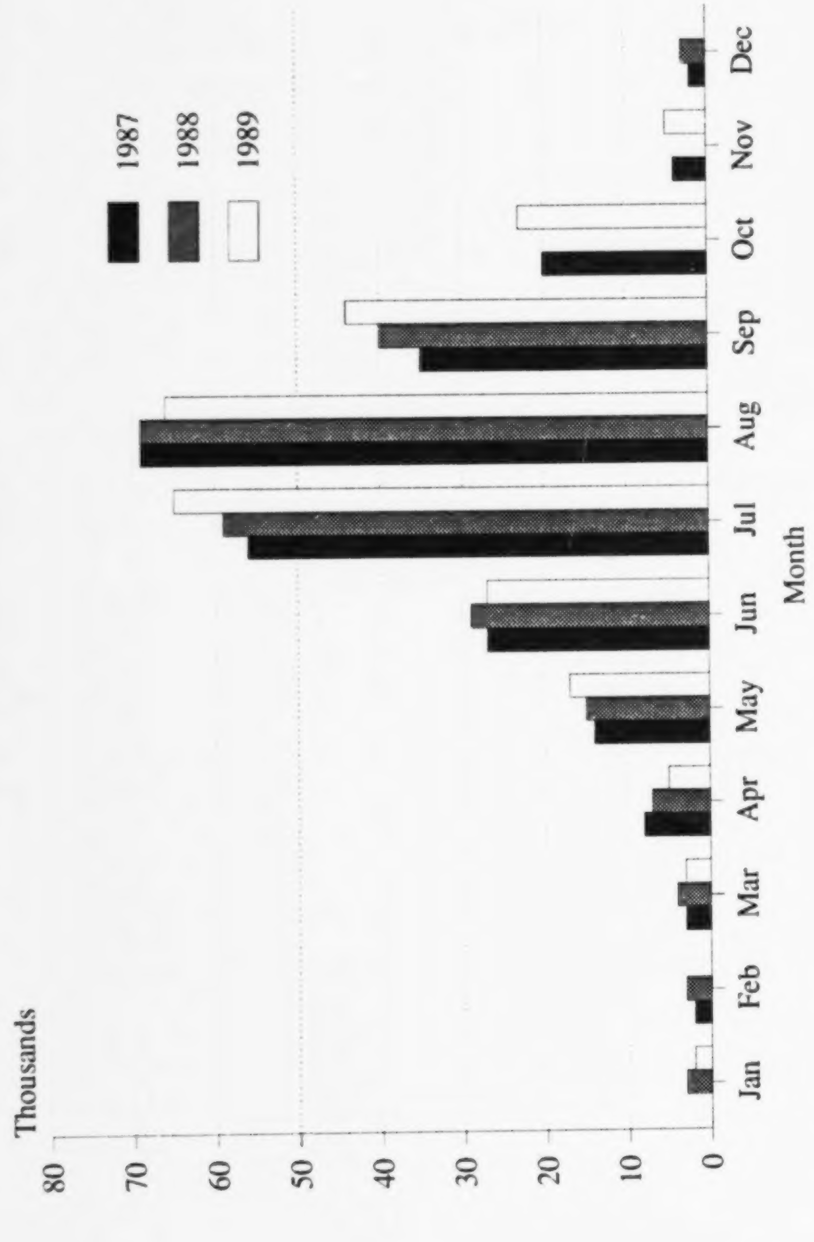


Annual Visitation
Acadia National Park

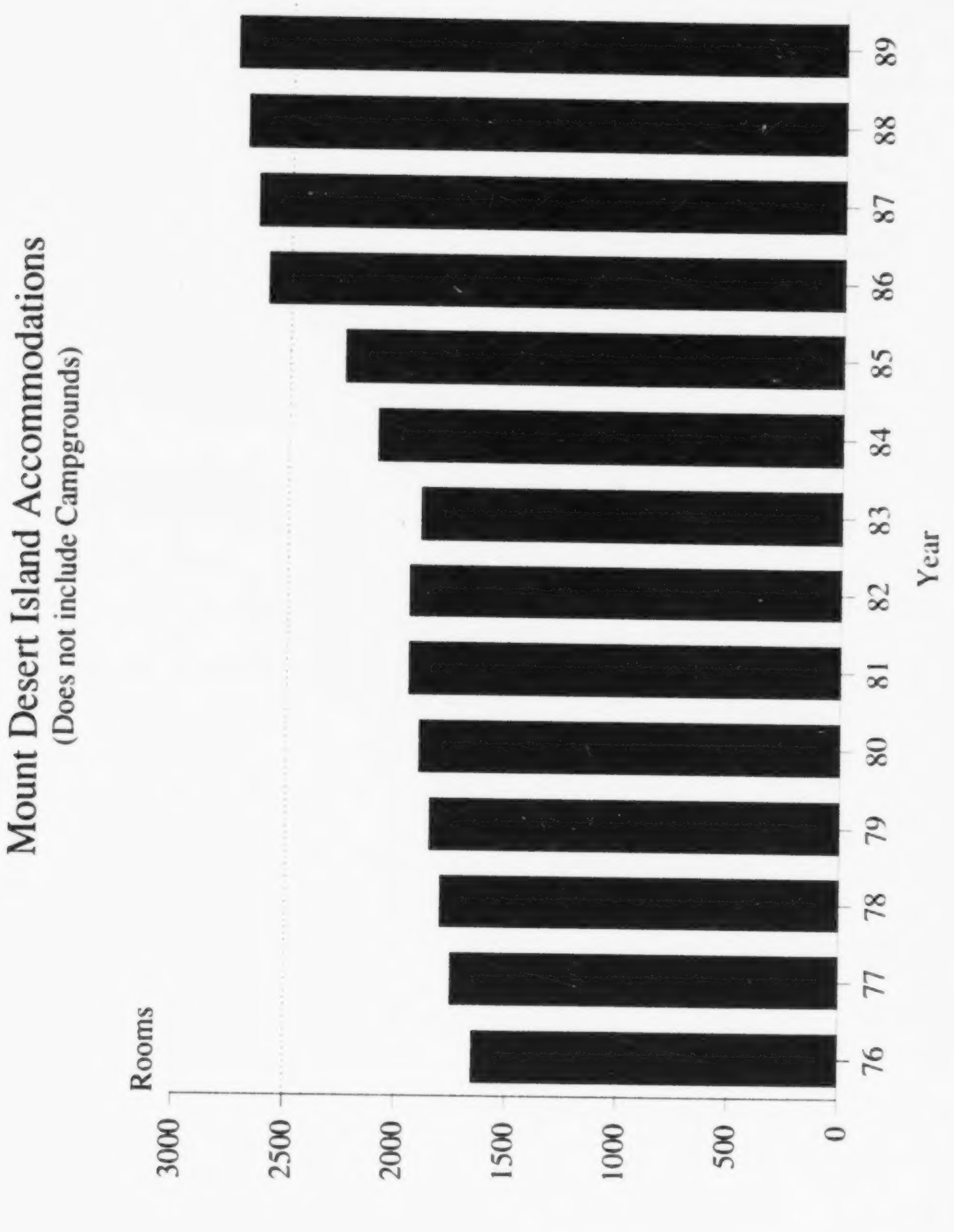

Monthly Visitation
Acadia National Park

Thompson I., Schoodic & Isle au Haut

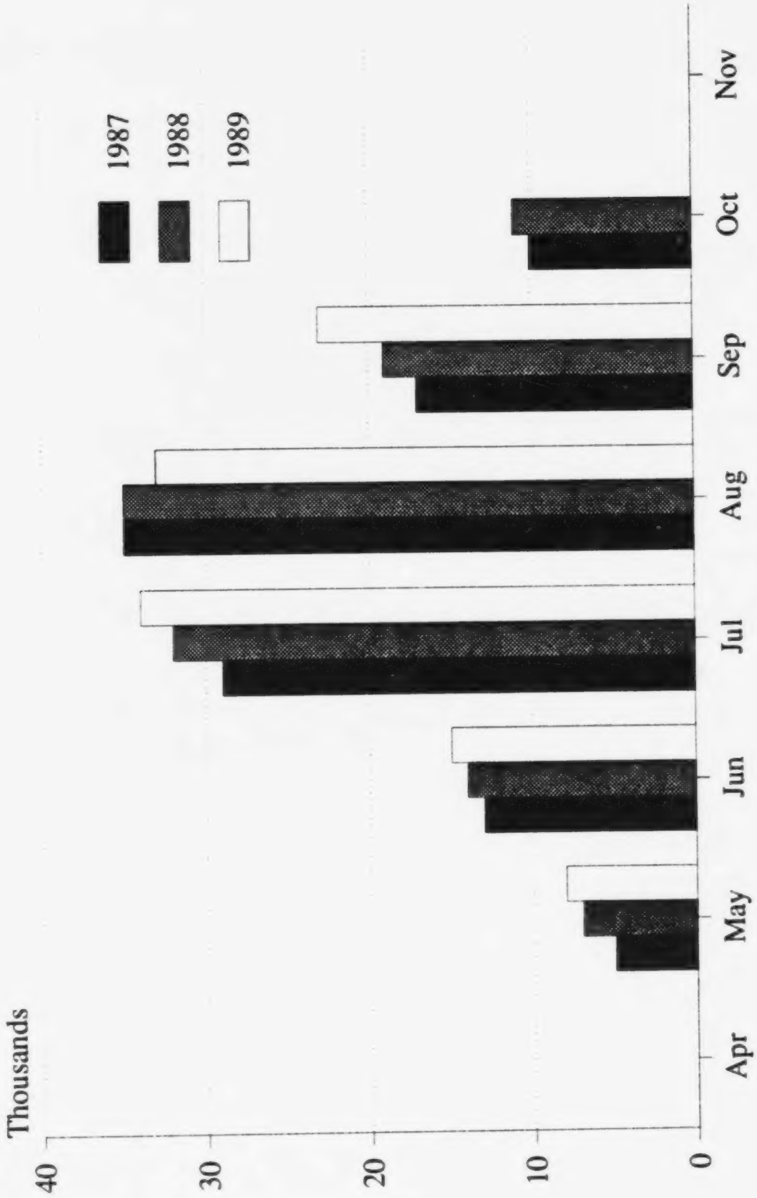
Park Loop Road Traffic Count
Number of Autos



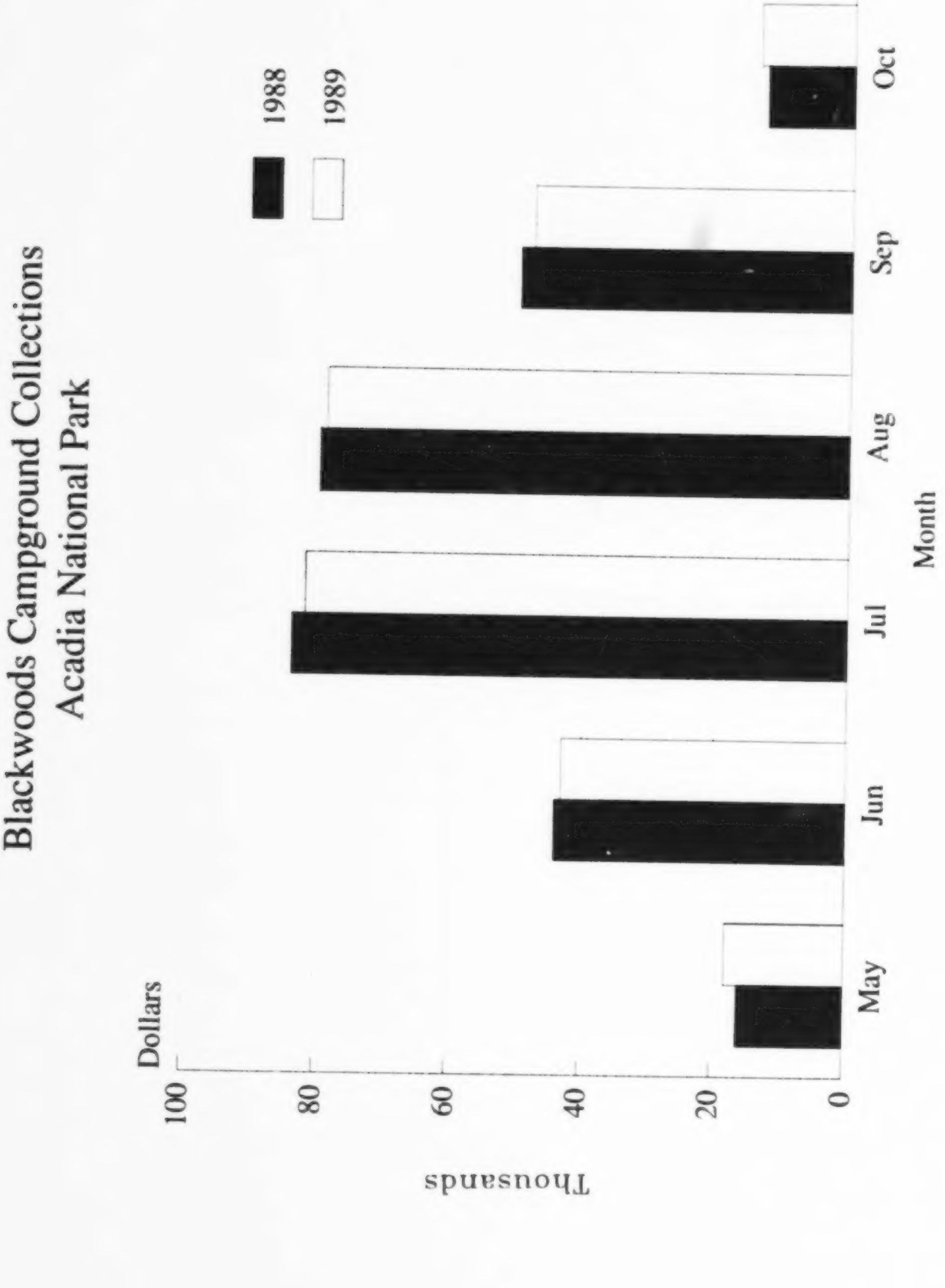
Based Sand Beach electronic counter



Mount Desert Island Accommodations
(Does not include Campgrounds)

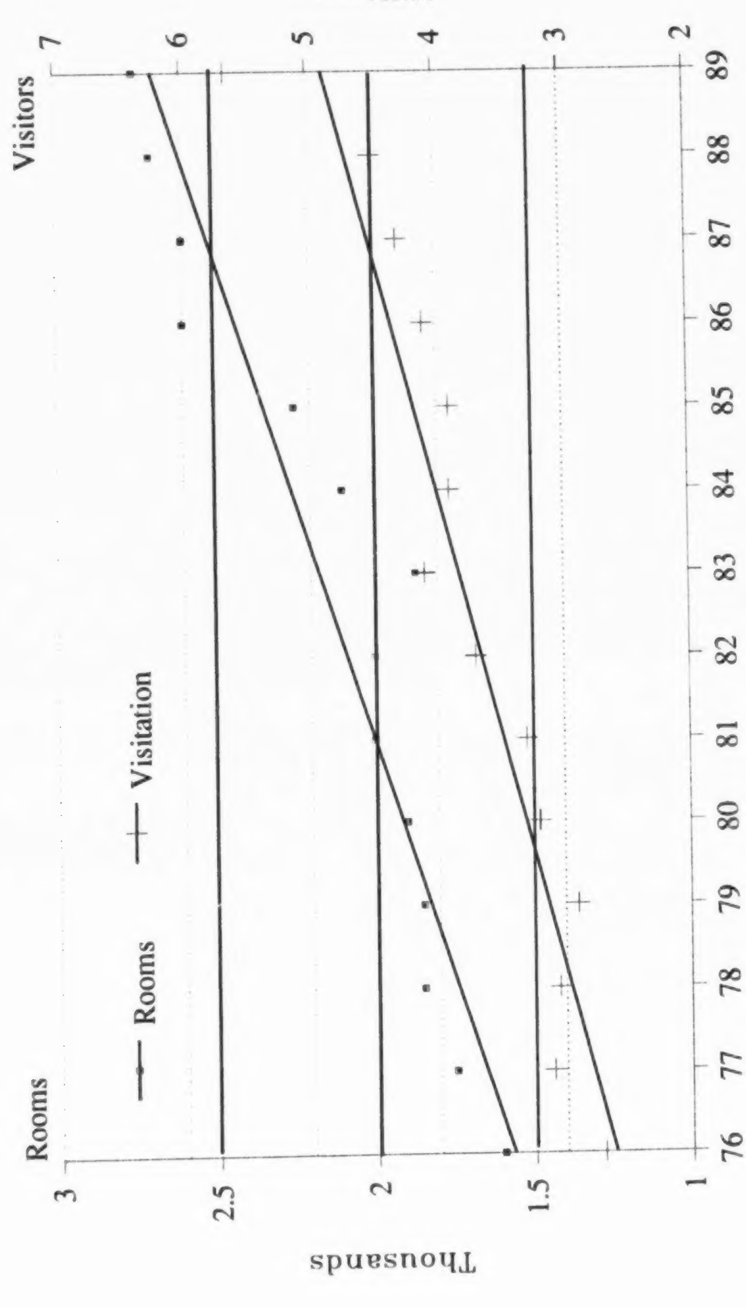


Fee Station Count
Autos, Bikes, & Annual/Eagle Passes



Blackwoods Campground Collections
Acadia National Park

Number of Rooms / Acadia Visitation
Mount Desert Island Rooms
Acadia National Park Visitation



VISITOR USE STATISTICS

Manning (1987) conducted a social science analysis providing information on visitor needs and preferences. This appendix summarizes the portion of Manning's report that describe park visitors. Copies of the complete report are on file at the park.

Residence of visitors:

Maine	22%
Massachusetts	13%
New York	11%
Other states (43)	40%
Canada	2.5%
Other countries	0.3%

Socioeconomic characteristics of visitors:

Education:	73% have some college education 29% hold graduate degrees
Income:	18% make $60,000 or more annually

Age of visitors:

Average age = 41

Visitor groups:

Family groups:	66%
Friends	20%
Family and friends	8%

Groups accompanied by individual(s) with disabilities: <5%
Groups accompanied by individual(s) who do not speak English: <2%

Primary destination of trip to Mount Desert Island:

Acadia National Park:	67%
Bar Harbor:	22%
Entire island:	5%

Table G-1. Visitor Participation in Selected Activities (Question 11)

Activity	Sample				
	Summer	Fall	Winter	Spring	Total
	(Percent)				
Sightseeing	96	95	80	94	94
Viewing the scenery	94	93	87	90	93
Walking	83	78	78	79	81
Hiking	72	59	73	68	69
Photography	71	70	54	63	68
Shopping	69	65	31	53	63
Picknicking	54	30	47	47	48
Nature study	49	33	38	38	44
Camping	48	23	31	32	40
Boating	34	9	22	10	25
Bicycling	20	13	23	21	19
Tour participant	19	7	6	4	13
Fishing	10	3	12	10	9
Horseback riding	7	3	9	2	5
Skiing	3	4	33	3	5
Snowshoeing	1	1	10	1	1
Snowmobiling	1	–	7	1	

Table G-2. Most Important Visitor Activities (Question 12)

Activity	Sample				
	Summer	Fall	Winter	Spring	Total
	(Percent)				
Hiking	48	48	48	43	47
Viewing the scenery	42	50	34	50	44
Camping	36	22	26	27	31
Sightseeing	26	27	20	32	26
Nature study	24	18	22	28	23
Walking	19	28	34	28	23
Photography	15	17	10	17	15
Bicycling	14	14	15	17	14
Picnicking	9	6	17	12	10
Boating	9	6	7	4	8
Tour participant	7	3	5	1	5
Shopping	4	3	3	5	4
Fishing	4	2	4	6	4
Skiing	3	8	26	4	6
Horseback riding	3	4	3	3	3
Snowshoeing	1	1	3	2	1
Snowmobiling	1	1	3	1	1

Table G-3. Places Visited by Park Visitors (Question 23)

Place	Sample				
	Summer	Fall	Winter	Spring	Total
			(Percent)		
Information Services					
Thompson Island Information Center	25.2	17.0	21.7	17.4	22.3
Visitor Center	59.8	57.2	35.7	50.5	56.2
Attractions					
Abbe Museum	25.2	23.2	24.8	26.5	25.0
Acadia Wild Garden	37.5	30.5	24.2	34.6	34.9
Baker Island	7.1	2.6	5.1	2.2	5.4
Bar Island	13.9	9.1	25.5	11.2	13.5
Bass Harbor Head Lighthouse	41.6	39.9	33.8	36.1	39.9
Bubble Pond	39.8	39.9	39.5	40.5	[illegible]
Cadillac Mountain Road/Summit	87.8	84.9	58.0	82.9	84.4
Echo Lake Beach	51.6	33.7	38.2	36.1	45.2
Isle au Haut	3.2	4.7	5.1	1.9	3.4
Islesford Historical Museum	13.2	4.4	10.2	3.4	10.0
Jordan Pond House	50.1	53.0	40.1	40.2	48.4
Lake Wood	6.5	7.6	18.5	9.0	8.0
Northeast Creek	6.4	6.8	18.5	7.8	7.5
Otter Point/Otter Cliffs	64.1	63.7	64.3	58.6	63.2
Sand Beach	73.2	70.2	70.1	76.6	73.0
Schoodic Peninsula	12.6	15.1	31.8	13.4	14.6
Schooner Head Overlook	33.8	39.4	42.7	35.8	35.7
Sieur de Monts Nature Center	34.0	22.7	33.1	24.6	30.5
Thunder Hole	77.3	77.5	69.4	81.9	77.5
Wildwood Stables	14.7	7.8	16.6	10.3	13.0
Self-guided Nature Trails					
Jordan Pond Nature Trail	30.1	22.7	25.5	22.4	27.3
Ship Harbor Nature Trail	16.8	13.1	19.7	13.7	15.9
Carriage Paths					
Day Mountain	4.8	5.2	13.4	6.9	5.8
Eagle Lake	24.5	19.6	43.3	22.1	24.7
Hadlock Ponds	6.5	5.2	14.6	5.9	6.8
Parkman Mountain	5.0	4.7	10.8	4.0	5.2
Witch Hole Pond	12.9	9.9	29.9	13.4	13.7

Place	Sample				
	Summer	Fall	Winter	Spring	Total
			(Percent)		
Hiking Trails					
Acadia Mountain	16.1	9.9	23.6	8.4	14.4
Beech Mountain	14.1	7.8	17.8	6.5	12.1
Bernard Mountain	2.3	1.8	6.4	1.2	2.4
Cadillac Mountain	34.2	33.4	32.5	31.8	33.5
Champlain Mountain	18.9	16.2	19.7	15.9	18.0
Dorr Mountain	7.9	7.8	16.6	8.7	8.7
Mansell Mountain	2.2	2.3	6.4	2.5	2.6
Penobscott Mountain	7.5	7.8	10.2	6.9	7.6
Sargent Mountain	8.1	6.8	22.3	5.9	8.6
The Bubbles (Bubble Rock)	22.5	20.4	31.2	22.1	22.7
Facilities					
Bear Brook Picnic Area	8.0	6.5	14.6	10.3	8.6
Blackwoods Campground	19.6	20.1	26.1	27.1	21.3
Pretty Marsh Picnic Area	11.4	11.0	12.7	10.0	11.2
Thompson Island Picnic Area	5.8	4.2	15.9	8.1	6.6
Seawall Campground	15.8	4.4	10.8	7.5	12.2
Seawall Picnic Area	23.2	16.7	24.2	19.0	21.5

Length of stay on Mount Desert Island:

Average = 7 days

Stayed overnight:	78%
Campgrounds:	35%
Hotel/motel, etc.:	35%
Private home:	6%

Approximately 46% of visitors have been to Acadia National Park more than once, and of these, some return on a regular basis. The average number of previous visits to Mount Desert Island is nine.

Means of transportation:

Private car:	90%
RV:	5%
Bus:	1%

APPENDIX H: TRANSPORTATION ANALYSIS

During the summer of 1988, the planning newsletter included a question to get an initial reading of the public's opinion on a possible bus system in Acadia National Park. Ninety-one percent of the people who responded were in favor of a voluntary bus system to popular park destinations.

The provision of a shuttle bus system at Acadia would have two main advantages:

1) a shuttle would be convenient for the public and,

2) traffic congestion and overcrowding at parking areas on the Park Loop Road would be lessened.

However, shuttle systems have some common problems: They are costly to run, ridership is weather dependent, and many riders may want to use the system at certain time periods rather than equally throughout the day. To be successful, a mass transportation system will need incentives to encourage initial ridership; shuttle buses may have to be frequent and free of charge.

Public use could also be encouraged by limiting parking access within Acadia National Park, i.e., discontinuing parking in the right lane of Ocean Drive.

MASS TRANSPORTATION ANALYSIS

The National Park Service analyzed the feasibility of various potential shuttle bus systems. The most significant findings were as follows:

1) A feasible park bus system would have to be integrated with a town bus system so that riders could park their cars in motel, hotel, and other existing private and municipal lots.

2) The capital costs and parking area requirements for a mandatory shuttle bus system would require a considerable percentage of the existing park budget.

3) A system would operate at capacity in the peak visitation season, but below capacity for much of the remainder of the use period. At present visitation levels, it is necessary only 6-8 consecutive weeks per year.

COORDINATED BAR HARBOR/ACADIA NATIONAL PARK SYSTEM

The feasibility of mass transportation for Acadia National Park is linked to the implementation of a successful, complementary system in the town of Bar Harbor. The town and the park have critical parking congestion problems in the peak summer months. Parking area requirements for shuttle riders is an important issue. Due to the extensive parking area left vacant at motels each day as visitors drive to the park and downtown Bar Harbor, there is a significant pool of parking spaces that can be tapped. This is critical to the system's viability.

TOWN SYSTEM

The town of Bar Harbor has expressed interest in creating a shuttle bus system. Initial discussions with the park staff concerned ways of developing a coordinated system of transportation. The National Park Service provided transportation planning assistance, including analysis of several potential routes. It was determined that the most advantageous town route would be approximately 4 miles long; beginning at the ferry terminal site and ending at the town ball field, with intermediate stops at Route 3 and downtown Bar Harbor motels and hotels.

The system would be operational from 10 a.m. to 10 p.m., providing 49 trips per day. It would require 3 buses operating at 15 minute intervals, and 1 standby bus in case of equipment failure. A leased trolley style bus that would accommodate an estimated 220,050 riders could be leased for approximately $10,000 per month, per vehicle. Annual operating costs would be $86,500 for a three month visitor season. A 40-passenger bus system would accommodate 176,400 passengers at a cost of approximately $115,000 annually.

PARK SYSTEM

In coordination with the town, the park would implement a connecting system, to provide access to the park, by either purchasing or leasing buses, or by contracting with an independent bus service. The most effective and viable route would provide access to Cadillac Mountain. With an alternative access available the National Park Service could then prohibit recreational vehicles greater than 20 feet in length from the Cadillac Mountain Road. Such system could also reduce the parking demand on top of the mountain by 30-40 cars per hour and thereby reduce congestion problems. If there were 25 trips per day, serving 1,250 passengers total, then approximately 415 cars would be "replaced" by use of the shuttle.

This bus route would be operated at 15 or 30 minute intervals for twelve hours per day. It would require three buses, and a standby bus which could be shared with the town. The cost estimate of operating and maintaining this route would be approximately $133,000 for 15 minute headways, or $76,000 for 30 minute headways. Initial capital costs would be $375,000 for 15 minute headways, or $225,000 for 30 minute headways.

Other routes could be added to this system if it proved to be feasible. Potential additions would provide service from 10 a.m. to 6 p.m. at 15 minute intervals to the Jordan Pond area at approximately $300,000 per year (traffic on the Lower Mountain Road section of the Park Loop Road would have to remain two-way), and the Ocean Drive section of the Park Loop Road at approximately $150,000 per year.

Eventually, a full route would encompass the entire Park Loop Road, including access from downtown Bar Harbor. Service would be provided on the Park Loop Road from 10 am. to 6 p.m., and service up Cadillac Mountain would continue to 10 p.m. The length of this route would be approximately 25 miles (and only 18.5 miles after 6 p.m.). A fleet of 18 buses, at an initial capital cost of $1.3 million, would be needed to provide service for approximately 220,000 riders per season. The annual operating and maintenance costs would be approximately $405,000 to $600,000 per year depending on the method of purchase or lease.

MANDATORY MASS TRANSIT SYSTEM

A mandatory transit system was also evaluated. Forty-six buses would be required to meet 85% of 1987 peak visitation. They would need to operate at 10 minute intervals and would accommodate 868,500 visitors per season. The parking area requirements would have a significant impact: parking areas totalling approximately 20-22 acres would be required to accommodate 1600-1800 vehicles. Parking might be located in areas such as the Visitor Center, between Jackson Laboratory and Sieur de Monts, and near Blackwoods Campground. The annual cost of operating and maintaining this system is estimated at $968,000 and the cost of bus purchase would be $1.35 million. The capital costs, annual maintenance costs and environmental impacts of the parking associated with this system, as well as the limited number of visitors served led to the determination that this proposal was not feasible.

COST METHODOLOGY

The annual costs of the bus systems include all operating and maintenance costs (approximately $3 per mile). The cost estimates were based on the following assumptions: The vehicles would be large shuttle buses or modified school buses, estimated to cost $75,000 per vehicle (unless noted otherwise); the buses would have an 18-year life and a 50-passenger capacity.

Cost estimates included various operating schedule requirements. The total route time was analyzed in order to determine the number of buses required for each route. An estimated passenger capacity over the visitor season was generated using the number of trips per day and a bus capacity of 50 passengers.

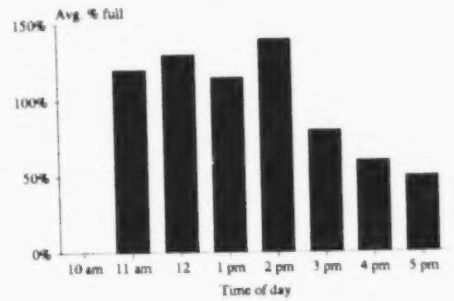
Table H-1: Parking Occupancy, Selected Areas

Parking Area	# of Parking Areas	# of Vehicles Parked	% occupancy	Observation Time	# of Vehicles on Roadside
Visitor Center	157	142	90.4	12:30 pm	–
Sieur de Monts	46	46	100.0	12:20 pm	23
North Face Trail	13	13	100.0	12 Noon	9
Gorge Path Trail	3	3	100.0	12:10 pm	3
Bear Brook Picnic Area	42	21	50.0	12:25 pm	–
Bear Brook Trail	6	6	100.0	12:35 pm	–
Egg Rock Overlook	9	9	100.0	12:40 pm	5
Precipice Trailhead	21	23	109.5	12:50 pm	18
Schooner Head Overlook	48	21	43.7	1:10 pm	–
Sand Beach	141	188	133.3	1:25 pm	98
Thunder Hole	61	28	45.9	1:45 pm	44
Gorham Mountain	22	24	109.1	1:55 pm	13
Otter Point	19	8	500	2:05 pm	15
Fabbri Memorial	22	19	86.4	2:10 pm	–
Wildwood Stables	10	22	220.0	2:35 pm	ss
Jordan Pond House	59	63	106.8	2:45 pm	5
Jordan Pond Overflow	75	60	80.0	3:00 pm	–
Jordan Pond	24	45	187.5	3:15 pm	–
Bubble Rock	23	20	87.0	3:40 pm	11
Bubble Pond	20	10	50.0	3:45 pm	–
Blue Hill Overlook	38	105	276.3	7:30 pm	*
Cadillac Summit	134	118	101.5	7:30 pm	*
Eagle Lake	25	25	100.0	10:00 am	

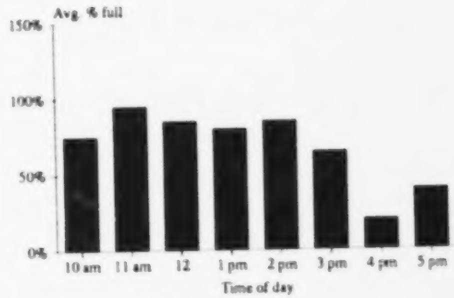
*223 vehicles were parked in the two parking areas on top of Cadillac Mountain. In addition, 39 vehicles were parked on the roadside between Cadillac Mountain and Blue Hill Overlook and 48 were parked on the roadside below the Overlook. Therefore, a total of 310 vehilcles were parked in an area designed for 172 vehicles.

Acadia National Park
Parking Lot Use / Time of Day

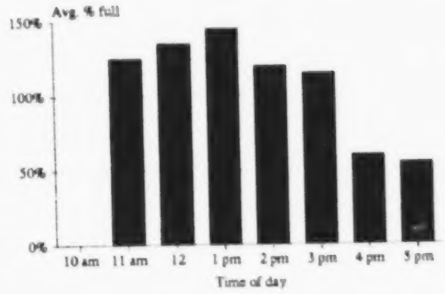
Sand Beach
lot capacity = 141 cars



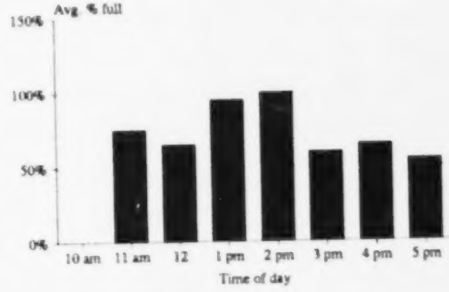
Sieur de Monts
lot capacity = 46 cars



Precipice
lot capacity = 21 cars



Bubble Rock
lot capacity = 23 cars



Figs. represent traffic counts from 6/18/88 to 8/3/88
Include right lane & illegal parking assoc. with indiv. lots
Prepared August 14, 1988

Table H-2: Cadillac Mountain Parking, 1988 Season
(Dates and Times Filled Beyond Capacity)

JULY	**Date**	**Time**
	1	5 pm
	2	4-6
	3	12-9
	12	4-5
	13	11-5
	15	4-9
	16	1-4
	18	12-5
	20	12-5
	22	4
	23	4-5
	25	12-6
	26	2-4
	28	12-5
	29	11-8
	30	1-4
	31	2-6
Total	**17 days**	**83 hours**

AUGUST	**Date**	**Time**
	1	1-5 pm
	2	11-6
	3	11-9
	4	3-4
	5	12-3
	6	10-8
	8	12-7
	9	11-8
	10	12-5
	11	12-5
	12	12-8
	13	12-6
	14	11-5
	16	3-6
	17	10-7
	18	11-8
	19	11-8
	20	11-7
	21	12-5
	22	1-7
	23	11-7
	24	11.5
	26	1-2
	27	11-7
	30	1-5
	31	12-7
Total	**26 days**	**185 hours**

SEPT.	**Date**	**Time**
	1	3&7 pm
	2	7
	3	11-6
	4	12-5
	5	5
	11	12-4
	14	10-4
	17	12-4
	21	3-5
	22	12-5
	24	10-7
	25	12-5
Total	**12 days**	**59 hours**

OCT	**Date**	**Time**
	3	5-6 pm
	4-11	**

**Counter's accuracy questioned on these dates

Grand Totals	Days	Hours
	56	228

TURNOVER TIMES

Precipice Trail:	50% remain for less than 2 hours 42% remain for 3 hours 9.5% remain for 4 hours
Sand Beach:	62.2% remain for less than 2 hours 34% remain for 2 hours 3.8% remain for 3 hours

BICYCLES

On the average one and one half hour car trip around the Park Loop Road, a motorist may expect to encounter 15 bicyclists. That works out to be a can maneuver every six minutes while trying to enjoy the scenery!

SPECIAL PROBLEMS

East Side:

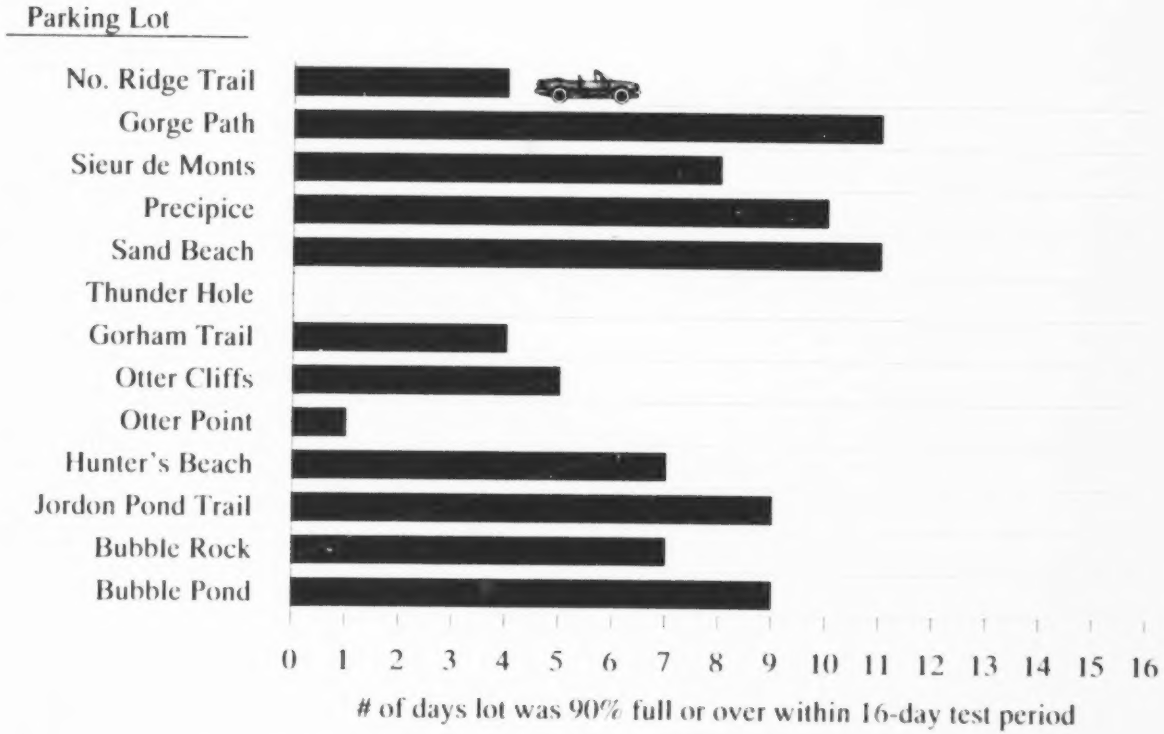
Otter Point lot design and location.
Otter Point right hand lane parking.
Unused lots adjacent to overused right-lane parking.
Sand Beach upper lot design is too small for any large vehicle.
Eagle Lake parking overflows into high speed traffic (Route 233) and blocks the bike lane.
Carriage Path and road crossing at Bubble Pond.

West Side:

Echo Lake, similar to Sand Beach is often beyond capacity by 11 a.m., and similar to Eagle Lake the overflow spills onto high speed traffic (Route 102) and blocks the bike lane.

Thompson Island Picnic Area, Wonderland Trail, Ship Harbor Trail, Acadia Mountain, Seawall Picnic Area, and **Ike's Point** have all gone beyond parking capacity several times this year.

Acadia National Park
Parking Lot Use/East Side



NOTE: Figs. represent traffic counts from 6/18/88 to 8/3/88
Include right lane & illegal parking assoc. with indiv. lot
Prepared August 14, 1988

APPENDIX I: UNDERTAKINGS REQUIRING CONSULTATION UNDER SECTION 106 OF THE NATIONAL HISTORIC PRSERVATION ACT

The following undertakings in the Acadia National Park draft *General Management Plan/Environmental Assessment* could affect historic properties as defined for the purposes of compliance with section 106 of the National Historic Preservation Act of 1966. Construction will be completed at the comprehensive design stage.

ALTERNATIVE 1: DISPERSED USE

Actions directly involving historic structures/cultural landscapes:

- Rehabilitate the carriage road system:
  - Implement a cultural landscape treatment plan (including vista clearing)
  - Establish rules of the road for users of the carriage roads.
  - Construct a carriage road bridge over the Park Loop Road at Bubble Pond.
  - Adaptively reuse the Brown Mountain gate lodge as an exhibit open to the public (including providing handicapped accessibility and public restrooms).
  - Adaptively reuse the Brown Mountain gate lodge grounds as a staging area for carriage concession and gate tower for ticket sales.
  - Adaptively reuse the Jordan Pond gate lodge for interpretive purposes.
- Rehabilitate the Thunder Hole gift shop to provide an interpretive exhibit and ranger station.
- Construct an addition to the Islesford Museum for curatorial storage.
- Rehabilitate the Gilley House.
- Rehabilitate the Baker Island lightkeeper's house.
- Rehabilitate the Park Loop Road:
  - Remove asphalt ditches on Cadillac Summit Road and replace with granite drainageways.
  - Remove bike lanes along the Park Loop Road approaching Cadillac Summit Road
  - Clear vistas

Actions requiring new construction (potential visual and archeological impacts):

- Construct a new visitor center and entrance gateway at Hulls Cove.
- Construct a new parking lot at Eagle Lake.
- Construct new trail connectors
  - from Sieur de Monts to Eagle Lake carriage road
  - over Young's Mountain between the high school and Duck Brook
  - from new Eagle Lake parking to Aunt Betty's Pond carriage road
  - from visitor center parking to Witch Hole Pond carriage road (reroute existing trail)
  - from route 3 to Champlain Mountain (using an abandoned trail alignment)
- Reestablish Western Mountain picnic areas.
- Expand Wildwood Stables.
- Install restrooms at Eagle Lake, Thunder Hole, Acadia Mountain, and Lake Wood.
- Construct curatorial storage, work and office space at park headquarters.
- Replace maintenance buildings at park headquarters.
- Construct additional office space at park headquarters.
- Construct additional staff housing at Harden Farm.
- Construct office addition to Schoodic ranger residence.

ALTERNATIVE 2: MANAGED USE

The following additional undertakings in alternative 2 would require section 106 compliance:

Segregate uses on portions of the carriage road system.
Construct an underpass for the carriage road at Bubble Pond (under the Park Loop Road instead of the bridge proposed in alternative 1).
Construct new visitor center, entrance gateway, and fee station at Hulls Cove (different configuration from alternative 1).
Construct fee station at the base of Cadillac Mountain.
Rehabilitate interior of Abbe Museum to convert to environmental education center.

ALTERNATIVE 3: MINIMUM ACCESS

The following additional undertakings in alternative 3 would require section 106 compliance:

Expand existing visitor center.

ADDITIONAL STUDIES REQUIRED

An inventory of historic structures has been completed. The National Park Service will consult with the state historic preservation officer on determinations of eligibility for listing on the National Register of Historic Places based on this inventory. Historic structure reports will be required for all work requiring major intervention on a historic structure. Cultural landscape reports and treatment plans will be required for rehbilitation of all cultural landscapes. Archeological surveys are required for all projects entailing new contruction. Necessary data recovery projects will be conducted where avoidance of archeological resources is not possible.

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March 3, 1849

NATIONAL PARK SERVICE
1916 - 1991

NATIONAL PARK SERVICE

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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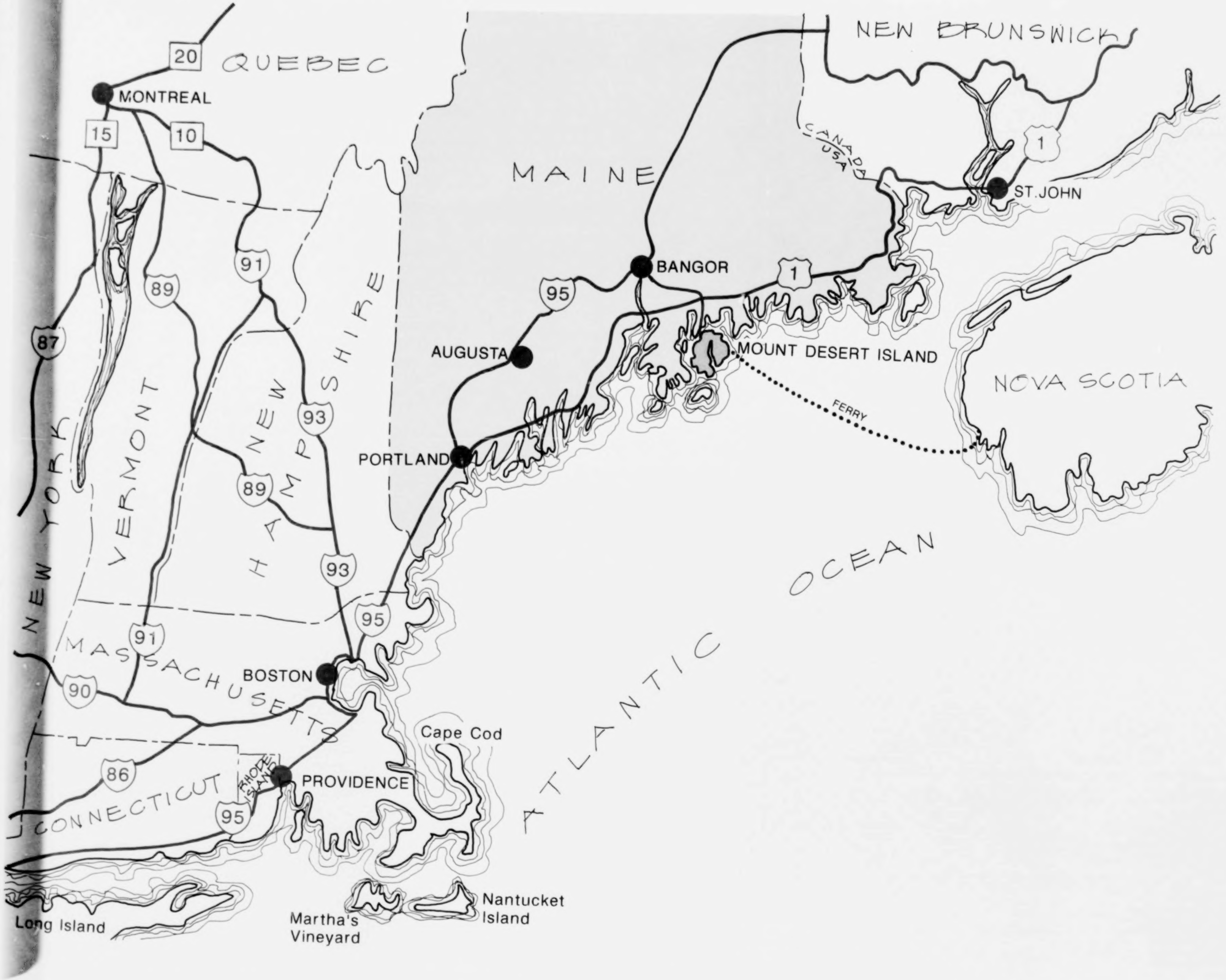
ACADIA NATIONAL PARK REGION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VERMONT
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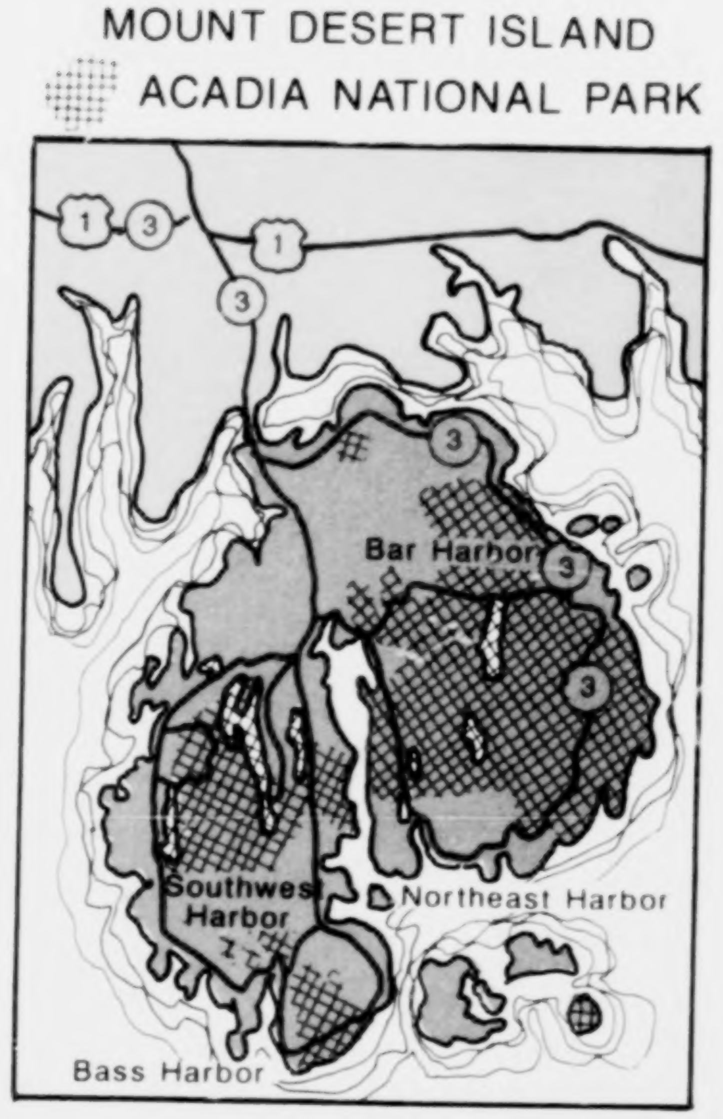
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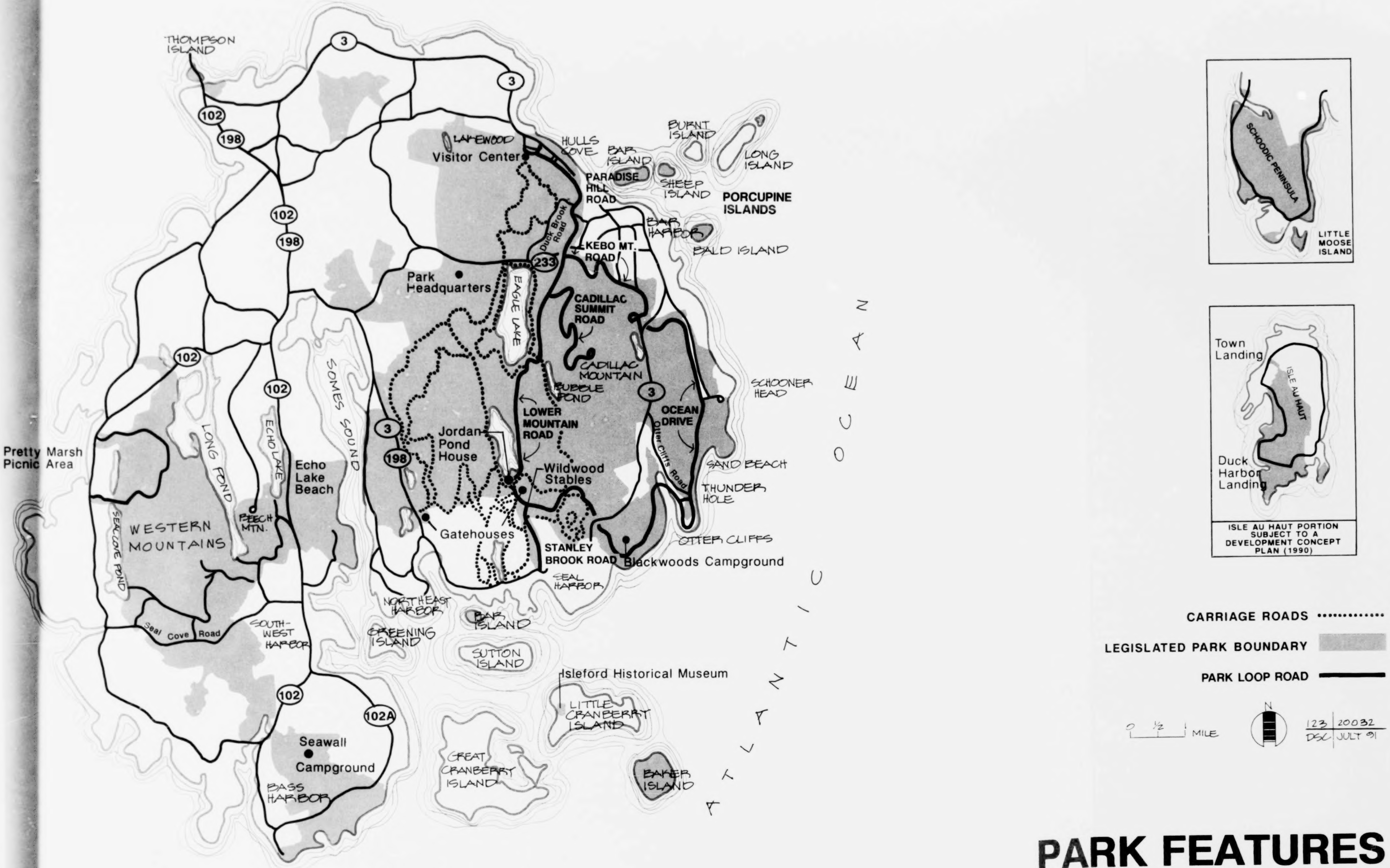
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LAKEWOOD
Visitor Center
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SHEEP ISLAND
PORCUPINE ISLANDS
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BAR HARBOR
KEBO MT. ROAD
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BALD ISLAND
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EAGLE LAKE
CADILLAC SUMMIT ROAD
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BUBBLE POND
LOWER MOUNTAIN ROAD
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SOMES SOUND
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Jordan Pond House
Otter Cliffs Road
Pretty Marsh Picnic Area
Echo Lake Beach
Wildwood Stables
SAND BEACH
THUNDER HOLE
BEECH MTN.
WESTERN MOUNTAINS
SEAL COVE POND
Gatehouses
STANLEY BROOK ROAD
Blackwoods Campground
OTTER CLIFFS
SEAL HARBOR
NORTHEAST HARBOR
BAR ISLAND
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SOUTHWEST HARBOR
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BAKER ISLAND
BASS HARBOR
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LITTLE MOOSE ISLAND
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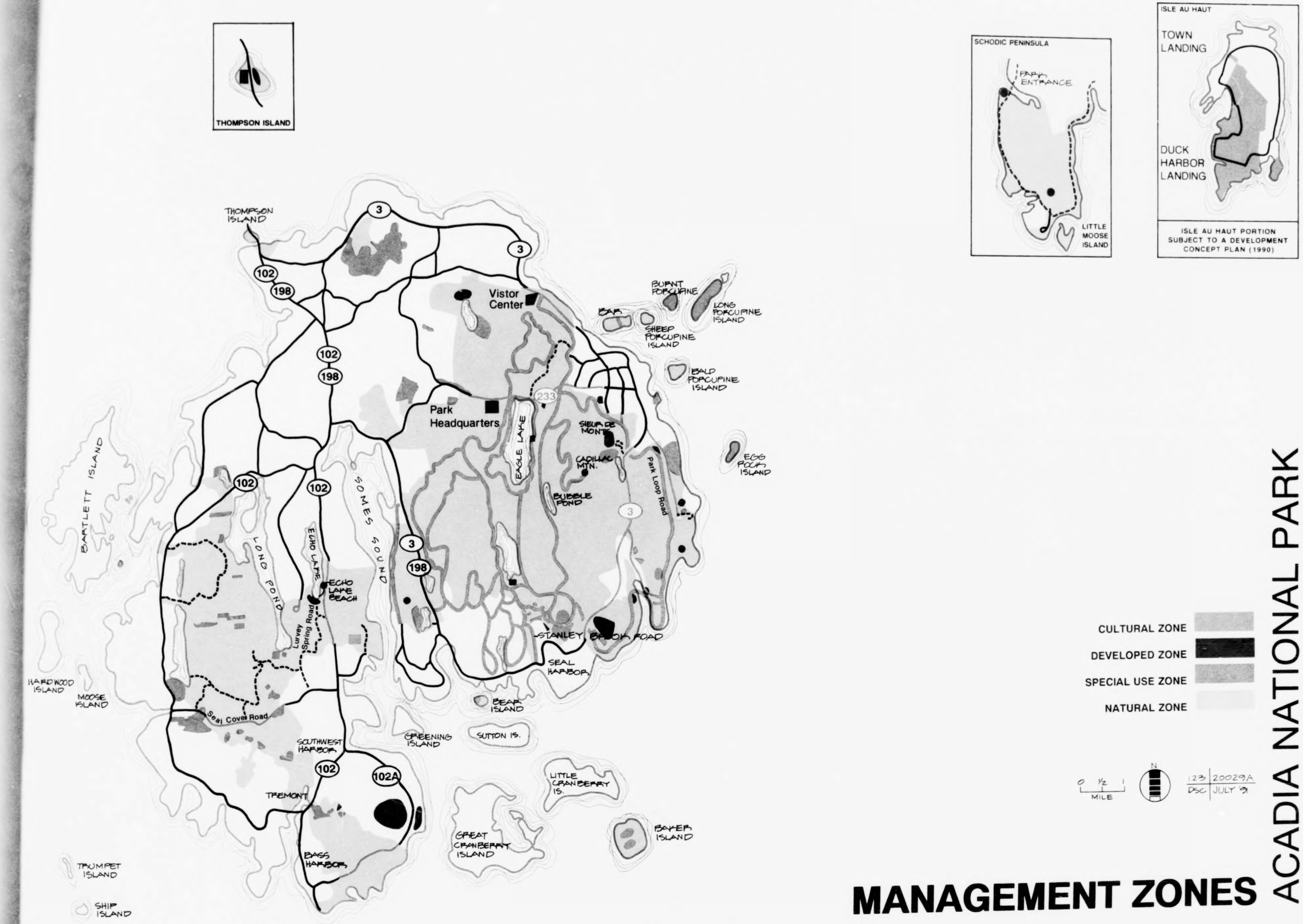
PARK FEATURES

ACADIA NATIONAL PARK

ACADIA NATIONAL PARK

MANAGEMENT ZONES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TOWN LANDING
DUCK HARBOR LANDING
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CADILLAC MTN.
EGG ROCK ISLAND
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BARTLETT ISLAND
SOMES SOUND
LONG POND
ECHO LAKE
ECHO LAKE BEACH
Lurvey Spring Road
STANLEY BROOK ROAD
SEAL HARBOR
HARDWOOD ISLAND
MOOSE ISLAND
Seal Cove Road
BEAR ISLAND
GREENING ISLAND
SUTTON IS.
SOUTHWEST HARBOR
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LITTLE CRANBERRY IS.
GREAT CRANBERRY ISLAND
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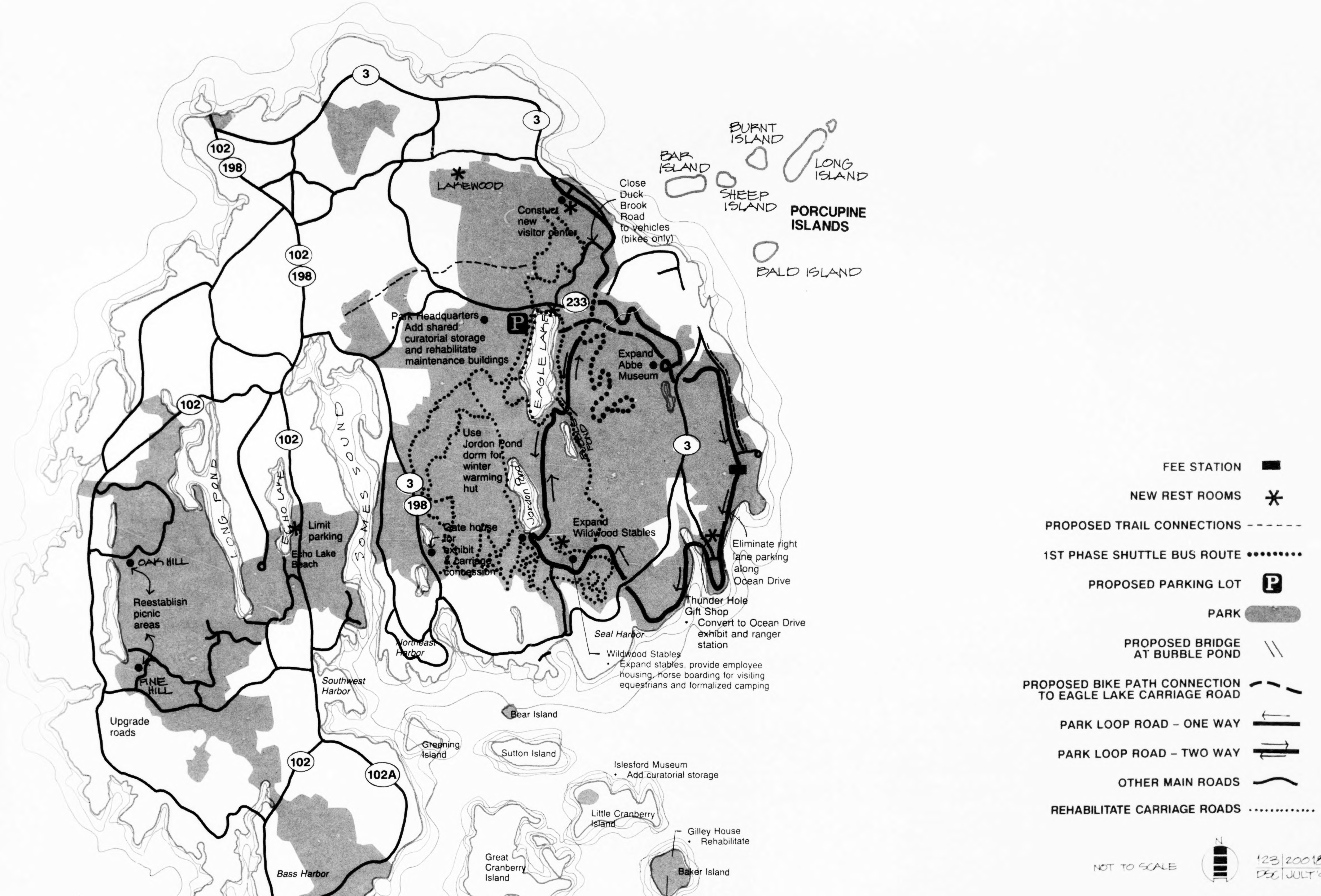
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LAKEWOOD
Construct new visitor center
Close Duck Brook Road to vehicles (bikes only)
BURNT ISLAND
BAR ISLAND
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233
Park Headquarters
• Add shared curatorial storage and rehabilitate maintenance buildings
P
EAGLE LAKE
Expand Abbe Museum
102
LONG POND
102
ECHO LAKE
SOMES SOUND
Use Jordon Pond dorm for winter warming hut
Jordon Pond
BUBBLE POND
3
3
198
Limit parking
Echo Lake Beach
Gate house for exhibit & carriage concession
Expand Wildwood Stables
Eliminate right lane parking along Ocean Drive
OAK HILL
Reestablish picnic areas
PINE HILL
Thunder Hole Gift Shop
• Convert to Ocean Drive exhibit and ranger station
Seal Harbor
Northeast Harbor
Wildwood Stables
• Expand stables, provide employee housing, horse boarding for visiting equestrians and formalized camping
Southwest Harbor
Upgrade roads
Bear Island
Greening Island
Sutton Island
102
102A
Islesford Museum
• Add curatorial storage
Little Cranberry Island
Gilley House
• Rehabilitate
Great Cranberry Island
Baker Island
Baker Island Lightkeeper's House
• Rehabilitate
Bass Harbor
FEE STATION ▬
NEW REST ROOMS *
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PROPOSED PARKING LOT P
PARK ▬
PROPOSED BRIDGE AT BUBBLE POND \\
PROPOSED BIKE PATH CONNECTION TO EAGLE LAKE CARRIAGE ROAD
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PARK LOOP ROAD – TWO WAY
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DISPERSED USE ALTERNATIVE

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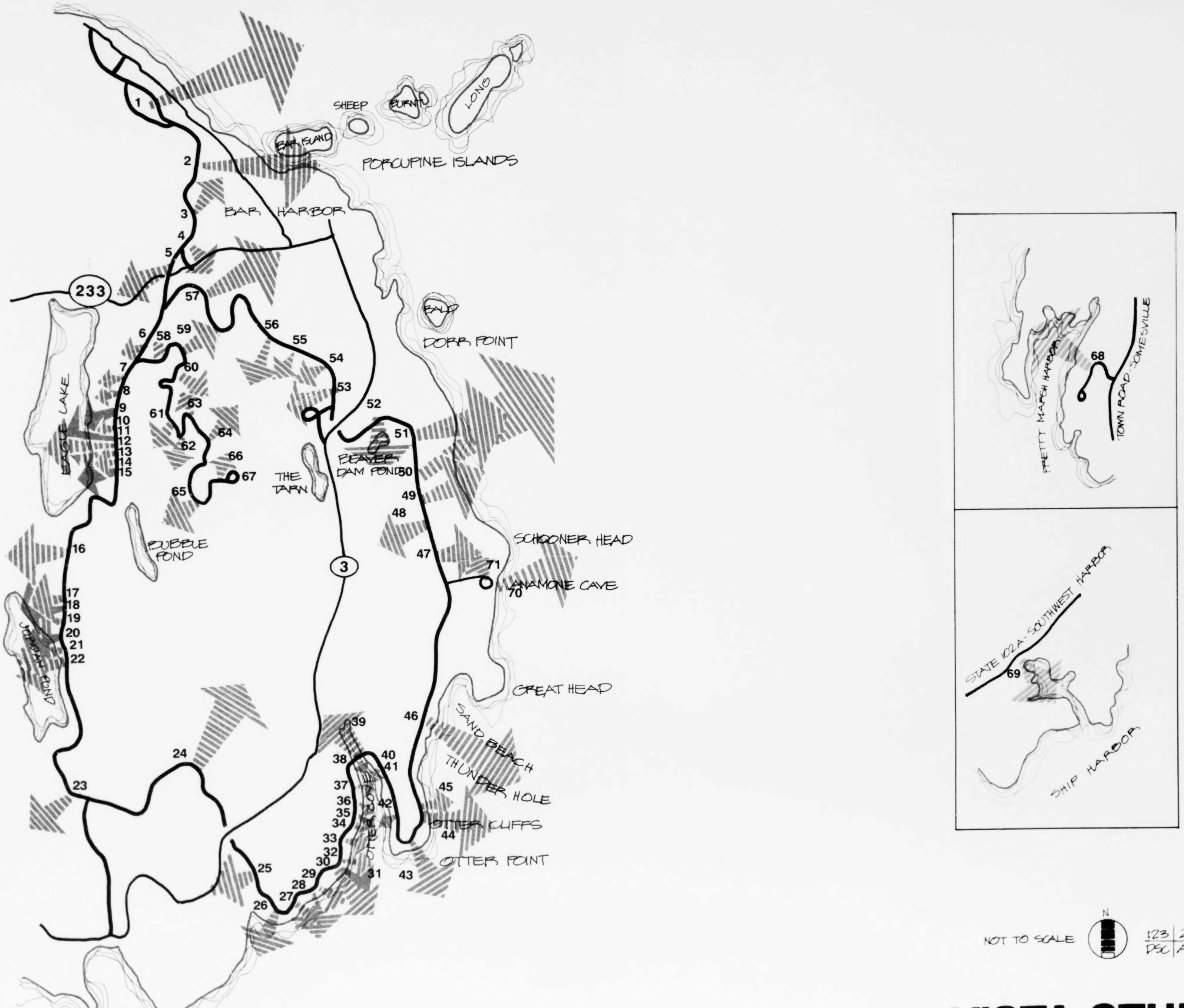
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BUBBLE POND
THE TARN
BEAVER DAM POND
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ANAMONE CAVE
GREAT HEAD
SAND BEACH
THUNDER HOLE
OTTER CLIFFS
OTTER POINT
OTTER COVE
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SHIP HARBOR
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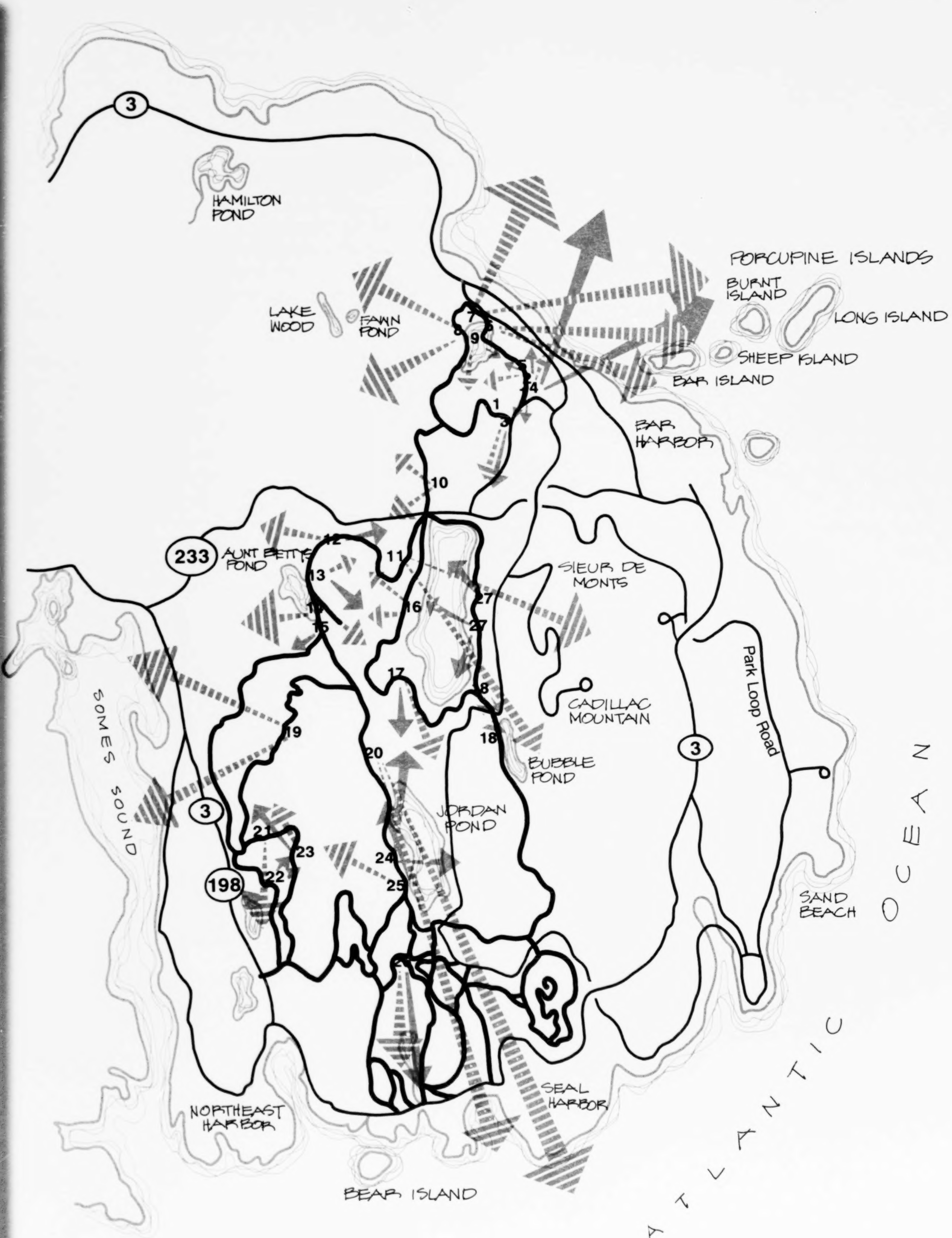
VISTA STUDY
PARK LOOP ROAD

ACADIA NATIONAL PARK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BURNT ISLAND
LONG ISLAND
LAKE WOOD
FAWN POND
SHEEP ISLAND
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BAR HARBOR
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SIEUR DE MONTS
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CADILLAC MOUNTAIN
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BUBBLE POND
Park Loop Road
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SOMES SOUND
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JORDAN POND
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SAND BEACH
ATLANTIC OCEAN
NORTHEAST HARBOR
SEAL HARBOR
BEAR ISLAND

NOT TO SCALE

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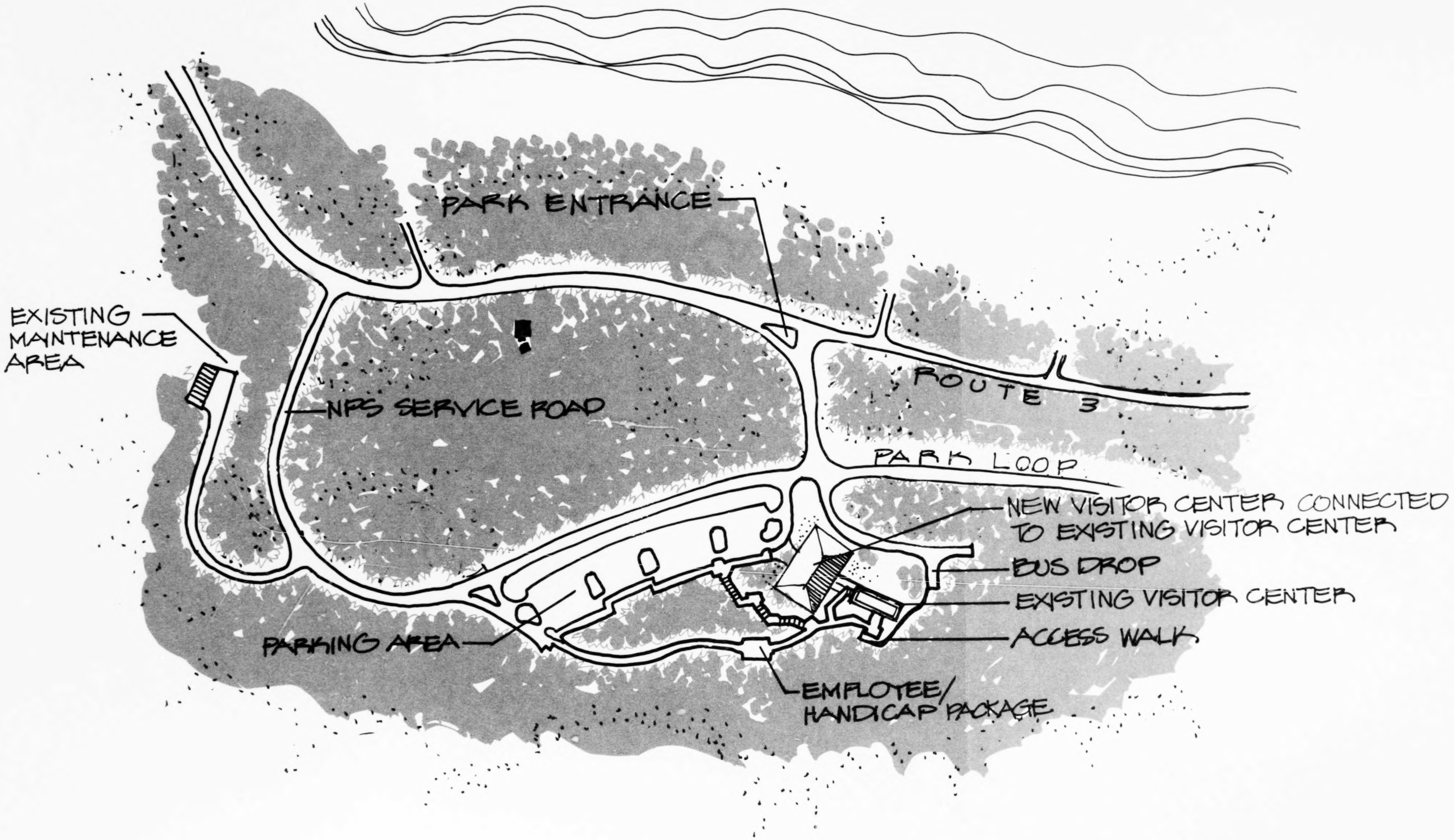
VISTA STUDY
CARRIAGE ROADS

ACADIA NATIONAL PARK


PARK ENTRANCE
EXISTING MAINTENANCE AREA
NPS SERVICE ROAD
ROUTE 3
PARK LOOP
NEW VISITOR CENTER CONNECTED TO EXISTING VISITOR CENTER
BUS DROP
EXISTING VISITOR CENTER
ACCESS WALK
PARKING AREA
EMPLOYEE/ HANDICAP PACKAGE
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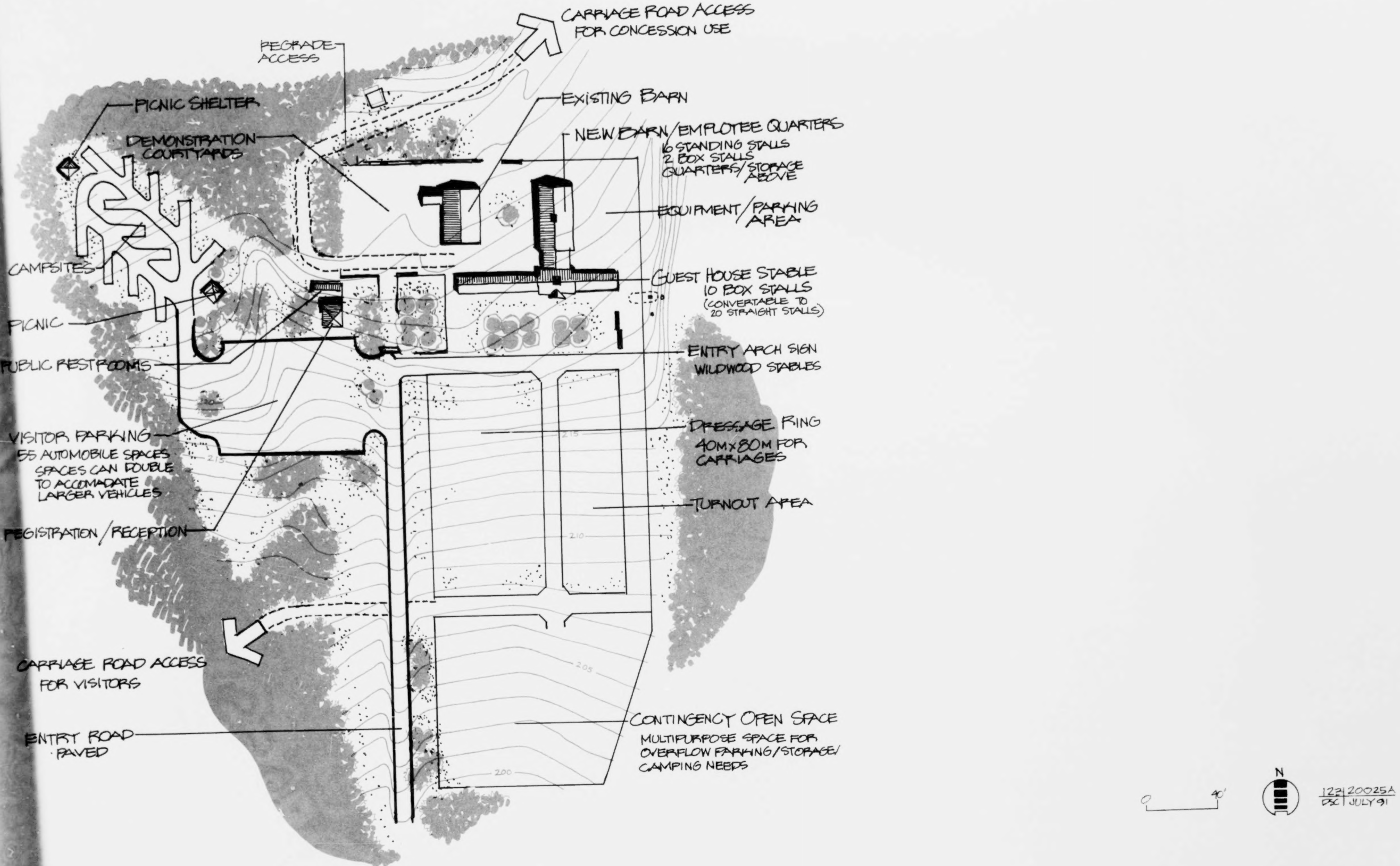
DISPERSED USE ALTERNATIVE
VISITOR CENTER

ACADIA NATIONAL PARK


CARRIAGE ROAD ACCESS
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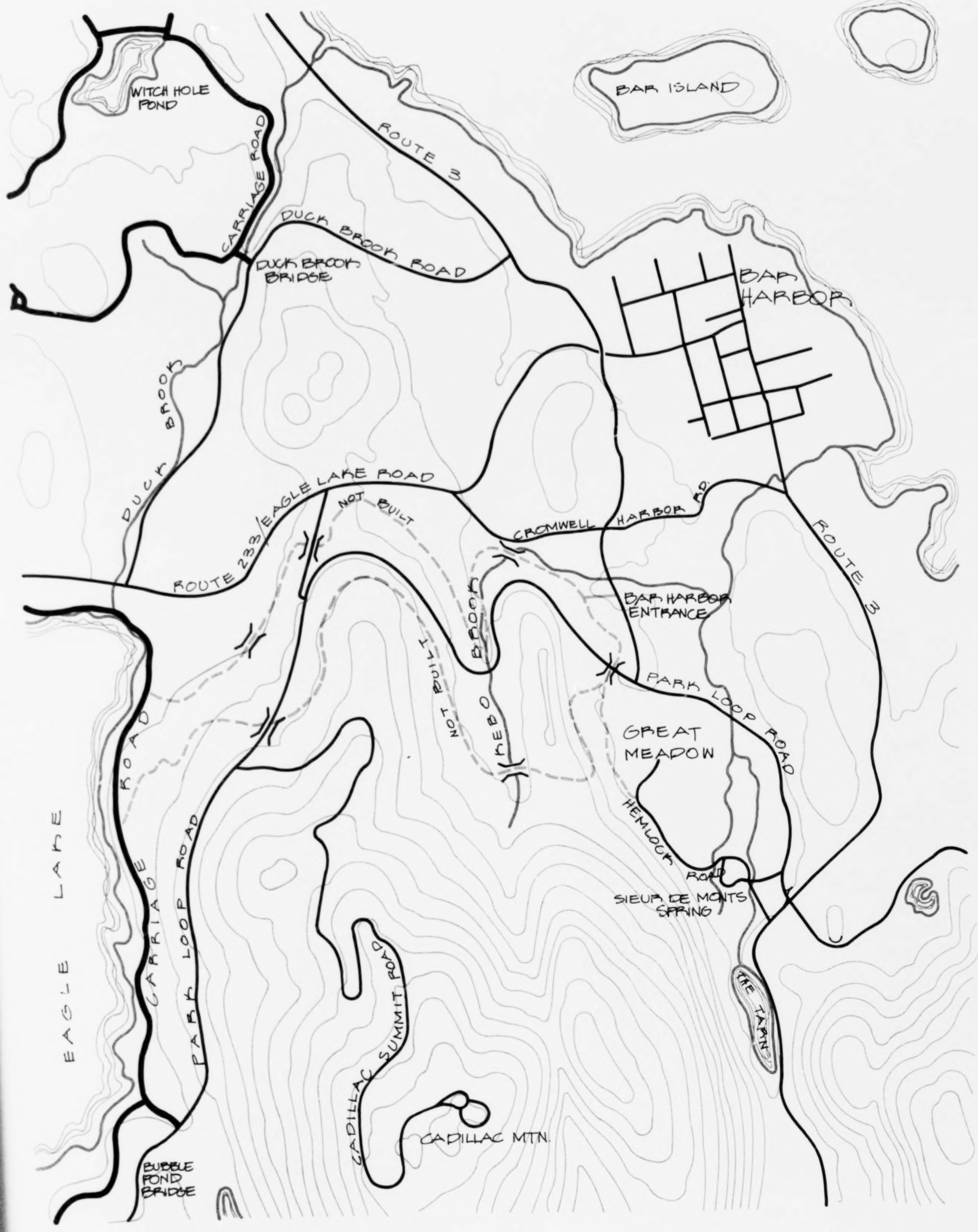
REGRADE ACCESS
PICNIC SHELTER
EXISTING BARN
DEMONSTRATION COURTYARDS
NEW BARN/EMPLOYEE QUARTERS
16 STANDING STALLS
2 BOX STALLS
QUARTERS/STORAGE ABOVE
EQUIPMENT/PARKING AREA
CAMPSITES
GUEST HOUSE STABLE
10 BOX STALLS
(CONVERTABLE TO 20 STRAIGHT STALLS)
PICNIC
PUBLIC RESTROOMS
ENTRY ARCH SIGN
WILDWOOD STABLES
VISITOR PARKING
55 AUTOMOBILE SPACES
SPACES CAN DOUBLE
TO ACCOMADATE
LARGER VEHICLES
DRESSAGE RING
40M x 80M FOR
CARRIAGES
215
TURNOUT AREA
REGISTRATION/RECEPTION
210
CARRIAGE ROAD ACCESS
FOR VISITORS
205
CONTINGENCY OPEN SPACE
MULTIPURPOSE SPACE FOR
OVERFLOW PARKING/STORAGE/
CAMPING NEEDS
ENTRY ROAD
PAVED
200
0
40'
N
123 | 20025A
DSC | JULY 91

DISPERSED USE ALTERNATIVE
WILDWOOD STABLES

ACADIA NATIONAL PARK

ACADIA NATIONAL PARK

CARRIAGE ROADS NEVER BUILT

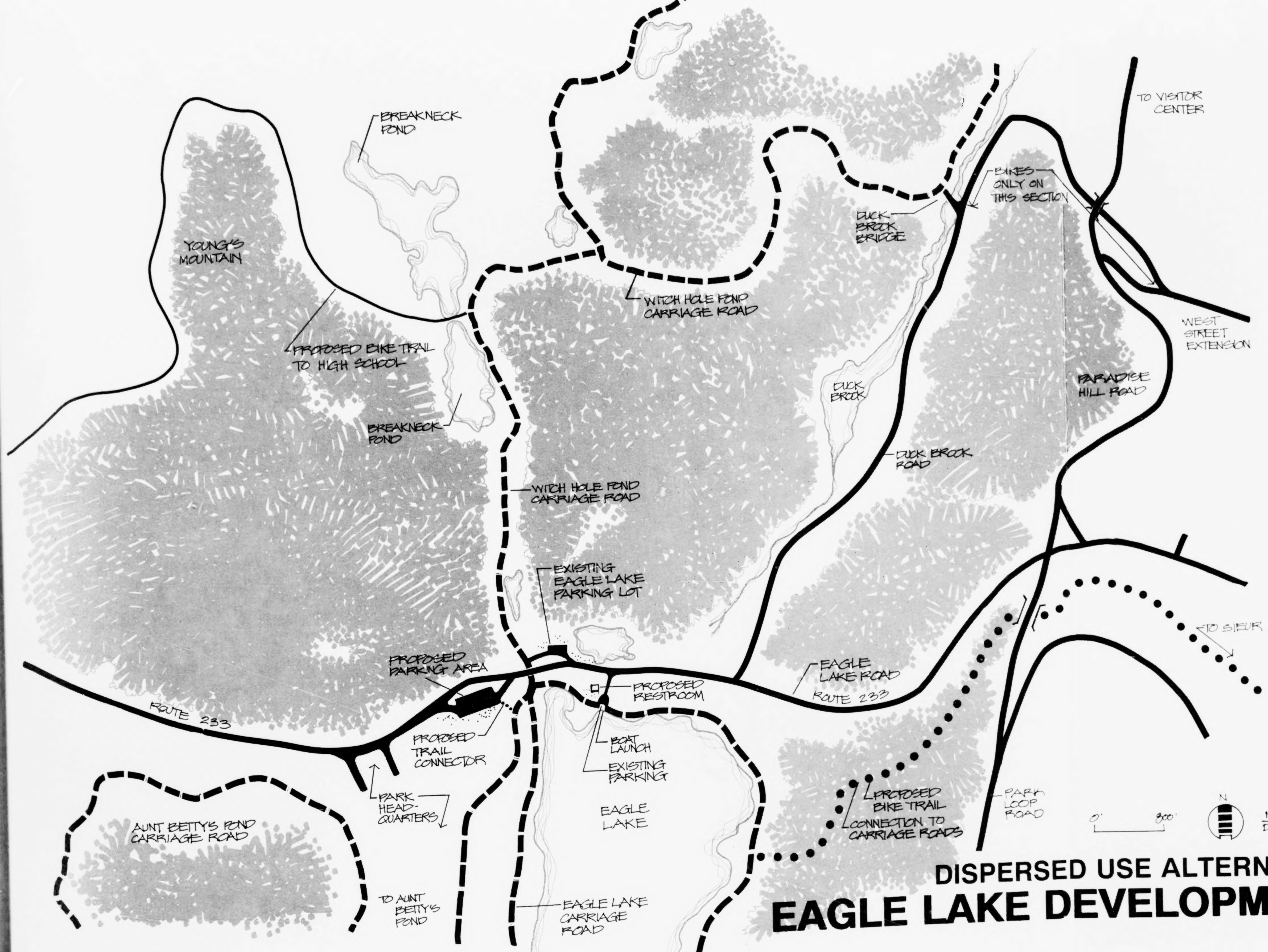

WITCH HOLE POND
BAR ISLAND
ROUTE 3
CARRIAGE ROAD
DUCK BROOK ROAD
DUCK BROOK BRIDGE
BAR HARBOR
DUCK BROOK
ROUTE 233/EAGLE LAKE ROAD
NOT BUILT
CROMWELL HARBOR RD
ROUTE 3
BAR HARBOR ENTRANCE
KEBO BROOK
NOT BUILT
PARK LOOP ROAD
GREAT MEADOW
HEMLOCK ROAD
SIEUR DE MONTS SPRING
THE TARN
EAGLE LAKE
CARRIAGE ROAD
PARK LOOP ROAD
CADILLAC SUMMIT ROAD
CADILLAC MTN.
BUBBLE POND BRIDGE

CARRIAGE ROADS DESIGNED IN THE 1930S BUT NEVER BUILT. PROPOSED AS ALIGNMENT FOR NEW BIKE TRAIL CONNECTOR

NOT TO SCALE

N

123 | 20023
DSC | JULY 91

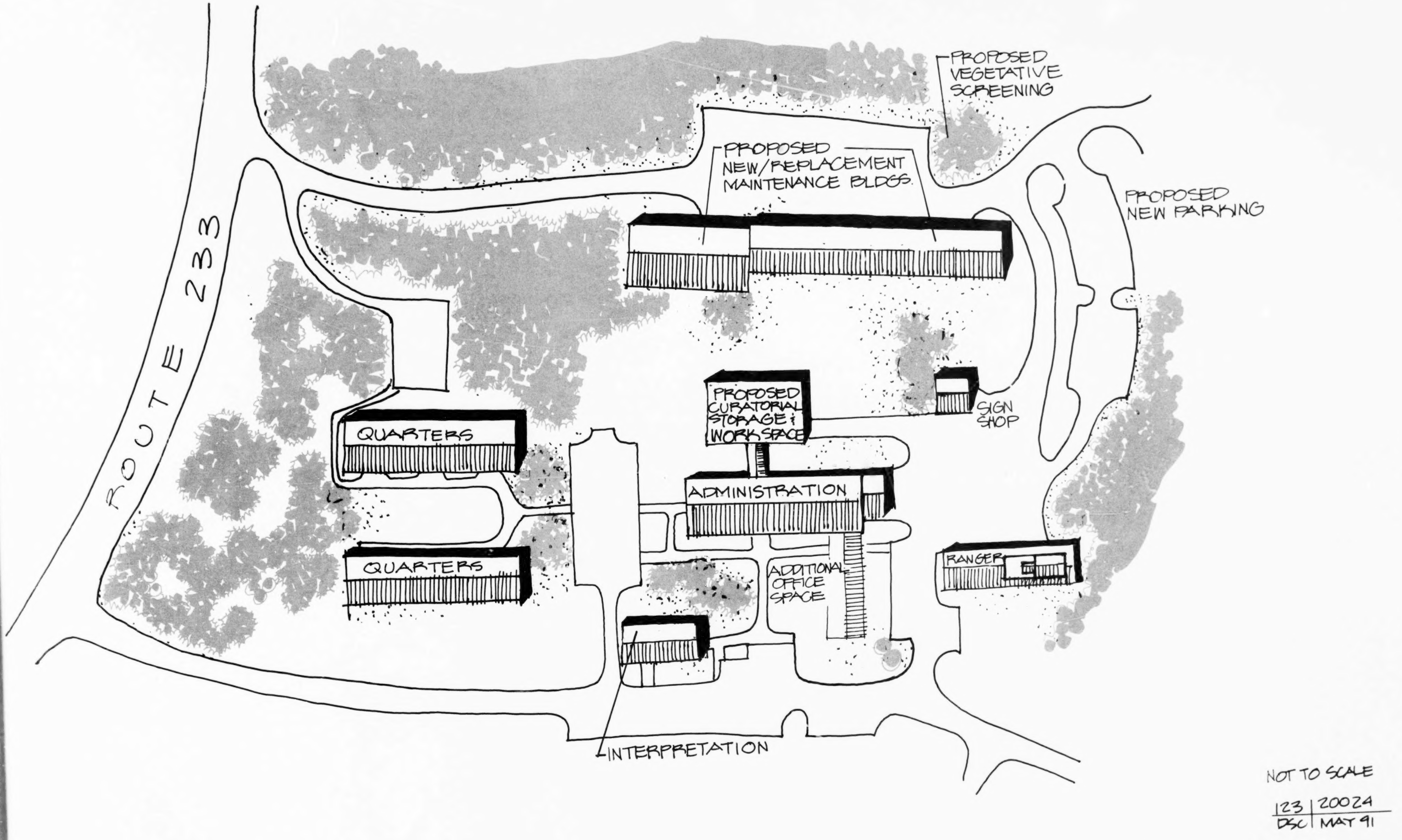

BREAKNECK POND
TO VISITOR CENTER
BIKES ONLY ON THIS SECTION
DUCK BROOK BRIDGE
YOUNG'S MOUNTAIN
WITCH HOLE POND CARRIAGE ROAD
PROPOSED BIKE TRAIL TO HIGH SCHOOL
WEST STREET EXTENSION
DUCK BROOK
PARADISE HILL ROAD
BREAKNECK POND
DUCK BROOK ROAD
WITCH HOLE POND CARRIAGE ROAD
EXISTING EAGLE LAKE PARKING LOT
TO SIEUR DE MONTE
PROPOSED PARKING AREA
EAGLE LAKE ROAD
PROPOSED RESTROOM
ROUTE 233
ROUTE 233
PROPOSED TRAIL CONNECTOR
BOAT LAUNCH
EXISTING PARKING
PARK HEAD-QUARTERS
PROPOSED BIKE TRAIL
CONNECTION TO CARRIAGE ROADS
PARK LOOP ROAD
EAGLE LAKE
AUNT BETTY'S POND CARRIAGE ROAD
0'
800'
N
TO AUNT BETTY'S POND
EAGLE LAKE CARRIAGE ROAD

123 | 20035
DSC | JULY 91

DISPERSED USE ALTERNATIVE

EAGLE LAKE DEVELOPMENT

ACADIA NATIONAL PARK


PROPOSED VEGETATIVE SCREENING
PROPOSED NEW/REPLACEMENT MAINTENANCE BLDGS.
PROPOSED NEW PARKING
ROUTE 233
QUARTERS
PROPOSED CURATORIAL STORAGE & WORK SPACE
SIGN SHOP
ADMINISTRATION
QUARTERS
ADDITIONAL OFFICE SPACE
RANGER
INTERPRETATION
NOT TO SCALE
N
123 DSC
20024 MAY 91

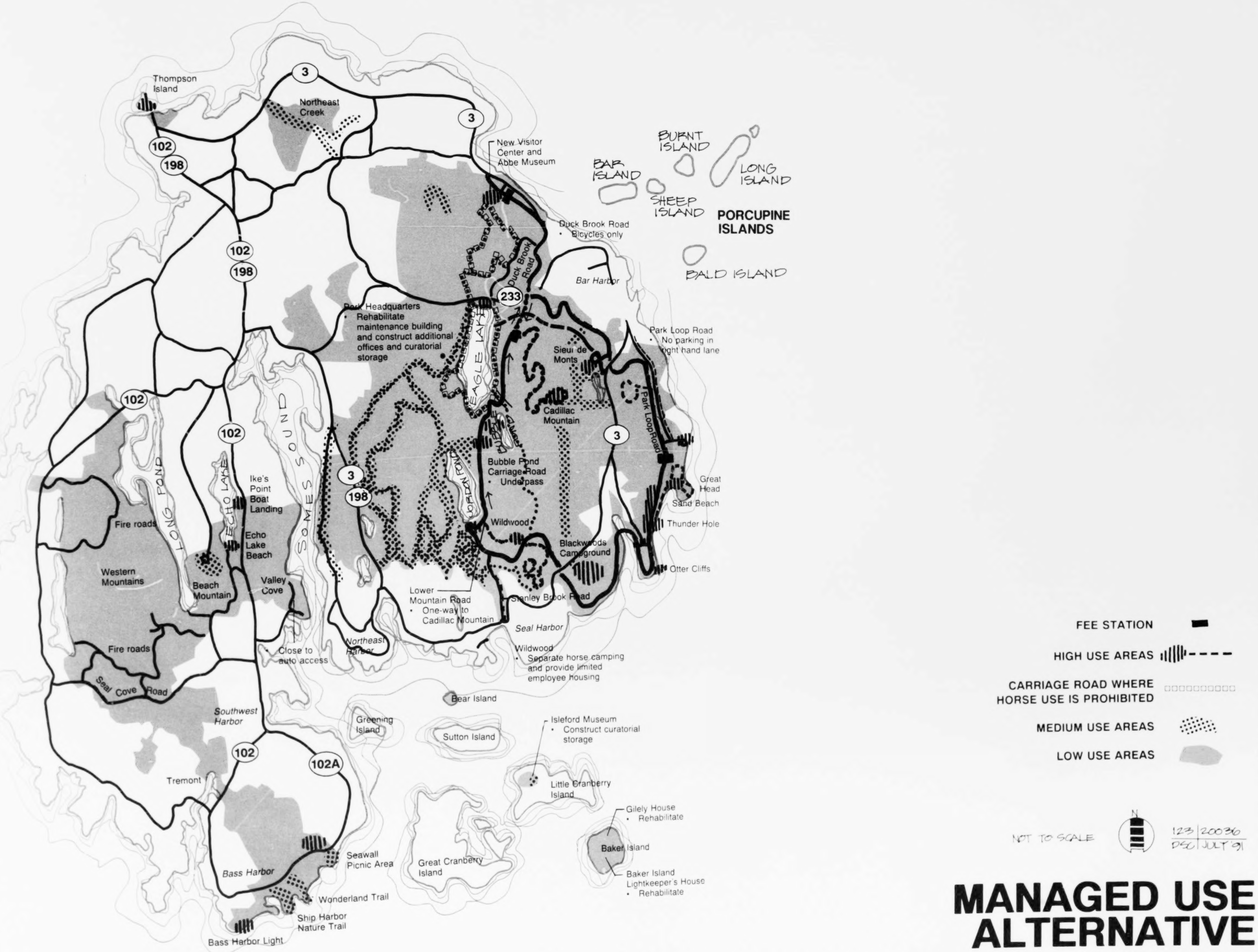
DISPERSED USE ALTERNATIVE

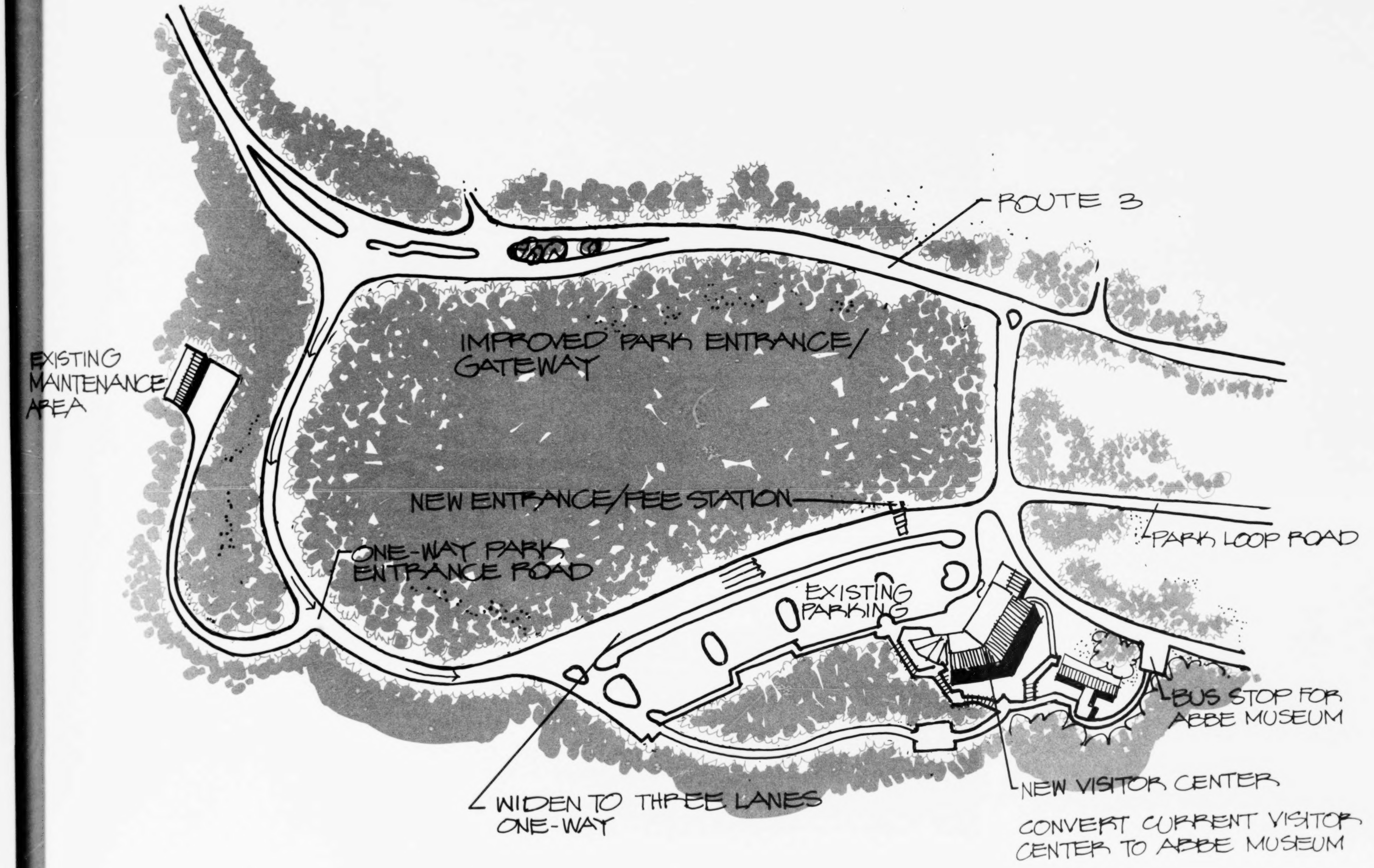
HEADQUARTERS SITE

ACADIA NATIONAL PARK

ACADIA NATIONAL PARK

MANAGED USE ALTERNATIVE


Thompson Island
Northeast Creek
3
102
198
New Visitor Center and Abbe Museum
BAR ISLAND
BURNT ISLAND
SHEEP ISLAND
LONG ISLAND
PORCUPINE ISLANDS
BALD ISLAND
Duck Brook Road
• Bicycles only
Duck Brook Road
Bar Harbor
233
Park Headquarters
• Rehabilitate maintenance building and construct additional offices and curatorial storage
EAGLE LAKE
Park Loop Road
• No parking in right hand lane
Sieur de Monts
Cadillac Mountain
Park Loop Road
Bubble Pond Carriage Road
• Underpass
JORDAN POND
Wildwood
Great Head
Sand Beach
Thunder Hole
Blackwoods Campground
Otter Cliffs
Stanley Brook Road
Lower Mountain Road
• One-way to Cadillac Mountain
Seal Harbor
Wildwood
• Separate horse camping and provide limited employee housing
LONG POND
ECHO LAKE
SOMES SOUND
Ike's Point Boat Landing
Echo Lake Beach
Fire roads
Western Mountains
Beach Mountain
Valley Cove
Fire roads
Seal Cove Road
• Close to auto access
Northeast Harbor
Bear Island
Southwest Harbor
Greening Island
Sutton Island
Isleford Museum
• Construct curatorial storage
102A
Tremont
Little Cranberry Island
Gilely House
• Rehabilitate
Baker Island
Baker Island Lightkeeper's House
• Rehabilitate
Great Cranberry Island
Seawall Picnic Area
Bass Harbor
Wonderland Trail
Ship Harbor Nature Trail
Bass Harbor Light
FEE STATION
HIGH USE AREAS
CARRIAGE ROAD WHERE HORSE USE IS PROHIBITED
MEDIUM USE AREAS
LOW USE AREAS
NOT TO SCALE
N
123 | 20036
DSC | JULY '91


ROUTE 3
EXISTING MAINTENANCE AREA
IMPROVED PARK ENTRANCE/ GATEWAY
NEW ENTRANCE/FEE STATION
PARK LOOP ROAD
ONE-WAY PARK ENTRANCE ROAD
EXISTING PARKING
BUS STOP FOR ABBE MUSEUM
NEW VISITOR CENTER
WIDEN TO THREE LANES ONE-WAY
CONVERT CURRENT VISITOR CENTER TO ABBE MUSEUM
N

123 | 20026A
DSC | JULY 91

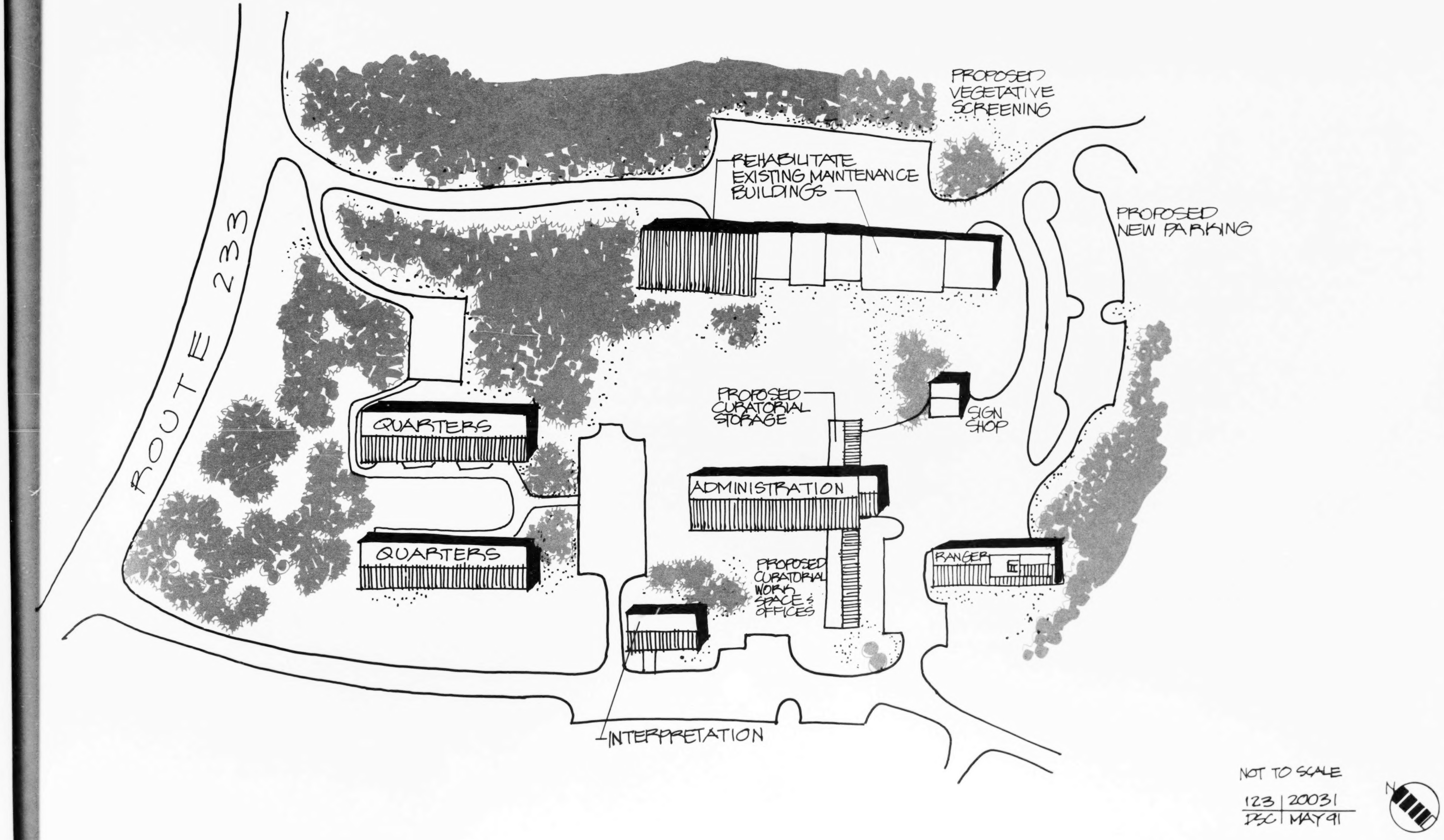
NOT TO SCALE

MANAGED USE ALTERNATIVE
VISITOR CENTER

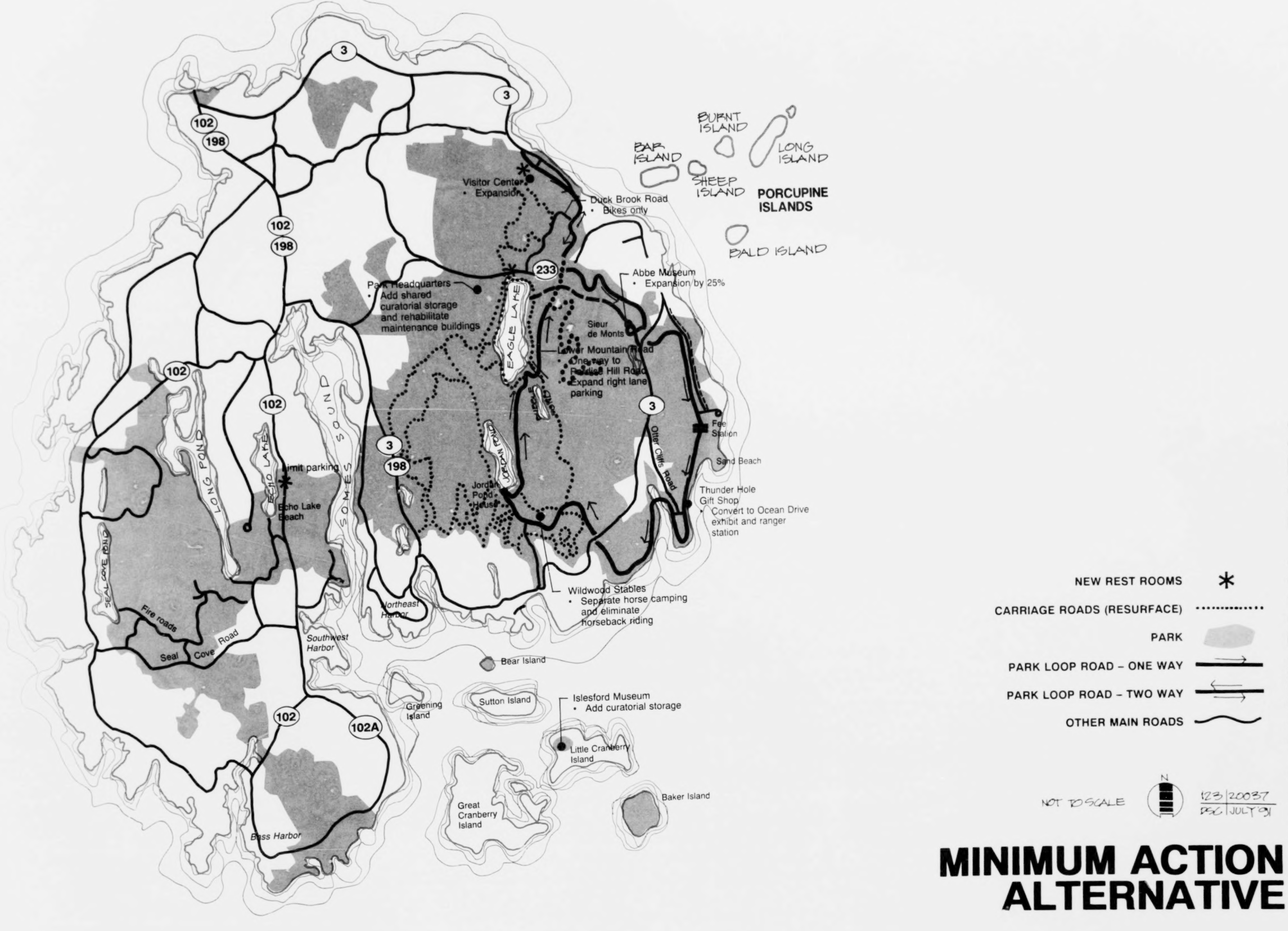
ACADIA NATIONAL PARK

ACADIA NATIONAL PARK

MANAGED USE ALTERNATIVE
HEADQUARTERS SITE


PROPOSED VEGETATIVE SCREENING
REHABILITATE EXISTING MAINTENANCE BUILDINGS
PROPOSED NEW PARKING
ROUTE 233
QUARTERS
PROPOSED CURATORIAL STORAGE
SIGN SHOP
ADMINISTRATION
QUARTERS
PROPOSED CURATORIAL WORK SPACE & OFFICES
RANGER
INTERPRETATION
NOT TO SCALE
N

123 | 20031
DSC | MAY 91



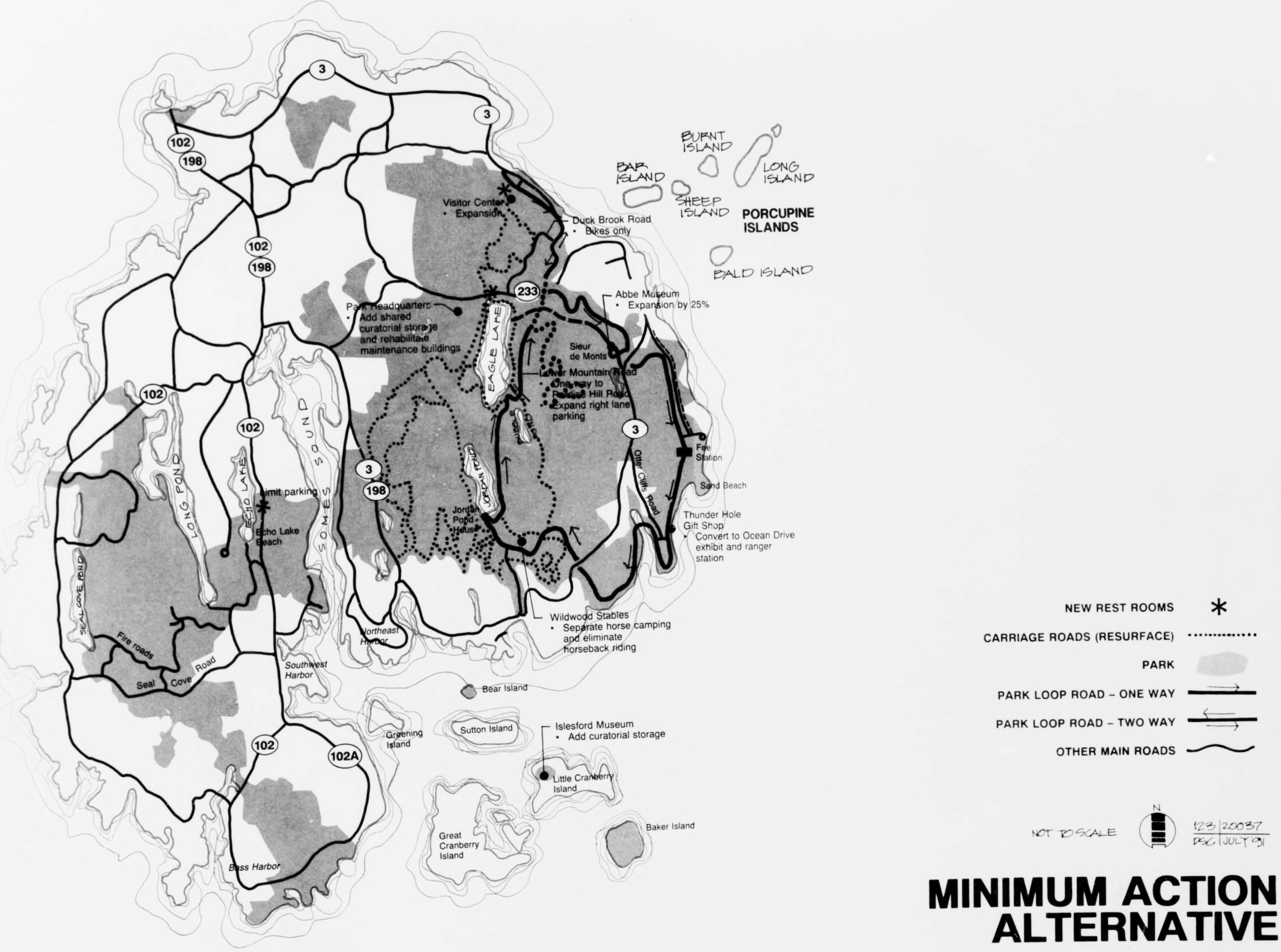
3
102
198
233
102A
BURNT ISLAND
BAR ISLAND
LONG ISLAND
SHEEP ISLAND
PORCUPINE ISLANDS
BALD ISLAND
Visitor Center
• Expansion
Duck Brook Road
• Bikes only
Abbe Museum
• Expansion by 25%
Park Headquarters
• Add shared curatorial storage and rehabilitate maintenance buildings
EAGLE LAKE
Sieur de Monts
Lower Mountain Road
• One way to Paradise Hill Road
• Expand right lane parking
Fee Station
Otter Cliffs Road
Sand Beach
Thunder Hole Gift Shop
• Convert to Ocean Drive exhibit and ranger station
JORDAN POND
Jordan Pond House
LONG POND
ECHO LAKE
Limit parking
Echo Lake Beach
SOMES SOUND
SEAL COVE POND
Fire roads
Seal Cove Road
Wildwood Stables
• Separate horse camping and eliminate horseback riding
Northeast Harbor
Southwest Harbor
Bear Island
Greening Island
Sutton Island
Islesford Museum
• Add curatorial storage
Little Cranberry Island
Great Cranberry Island
Baker Island
Bass Harbor
NEW REST ROOMS *
CARRIAGE ROADS (RESURFACE)
PARK
PARK LOOP ROAD - ONE WAY
PARK LOOP ROAD - TWO WAY
OTHER MAIN ROADS
NOT TO SCALE
N
123 | 20037
DSC | JULY '91

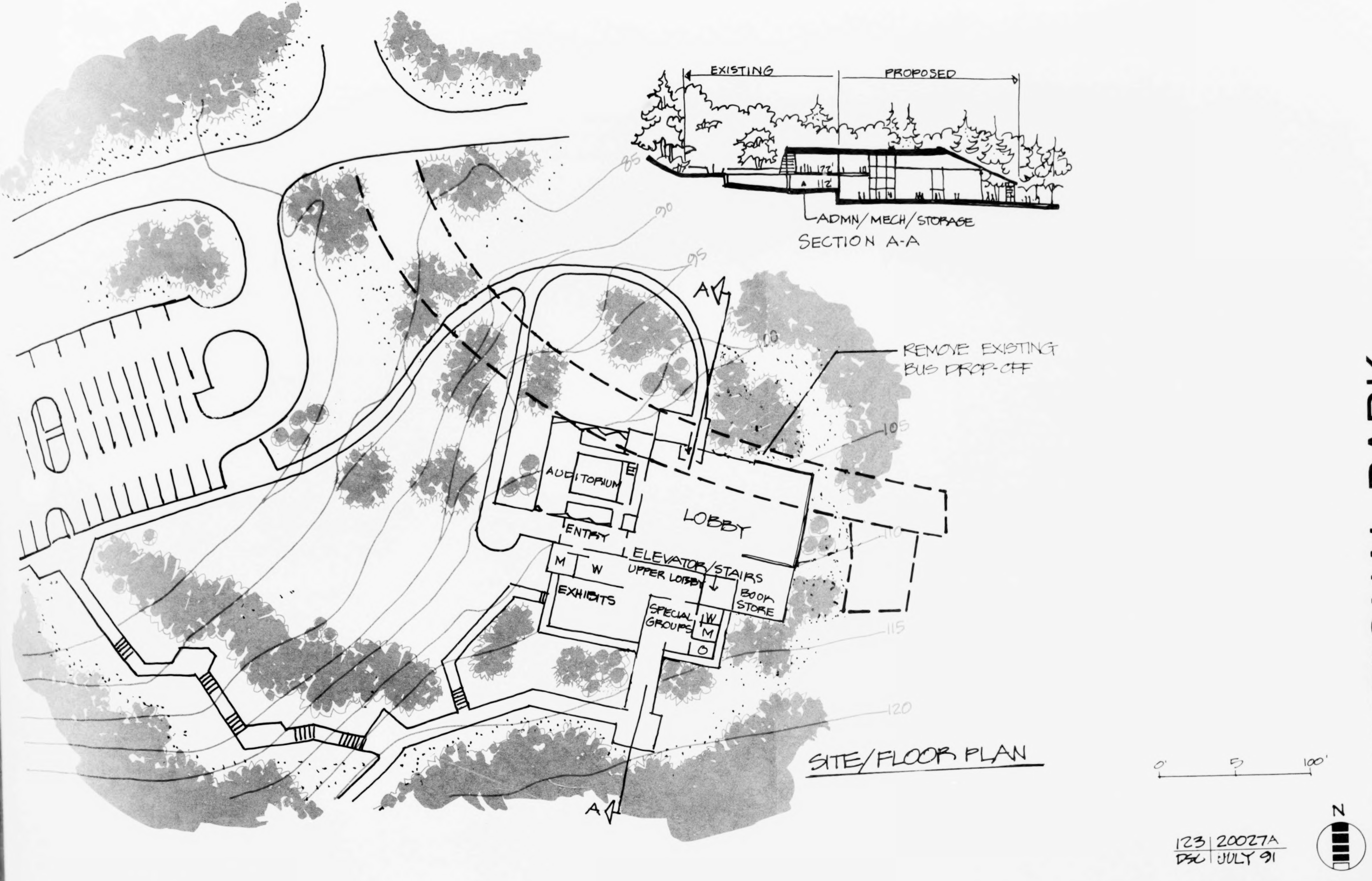
MINIMUM ACTION ALTERNATIVE

ACADIA NATIONAL PARK

ACADIA NATIONAL PARK

MINIMUM ACTION ALTERNATIVE

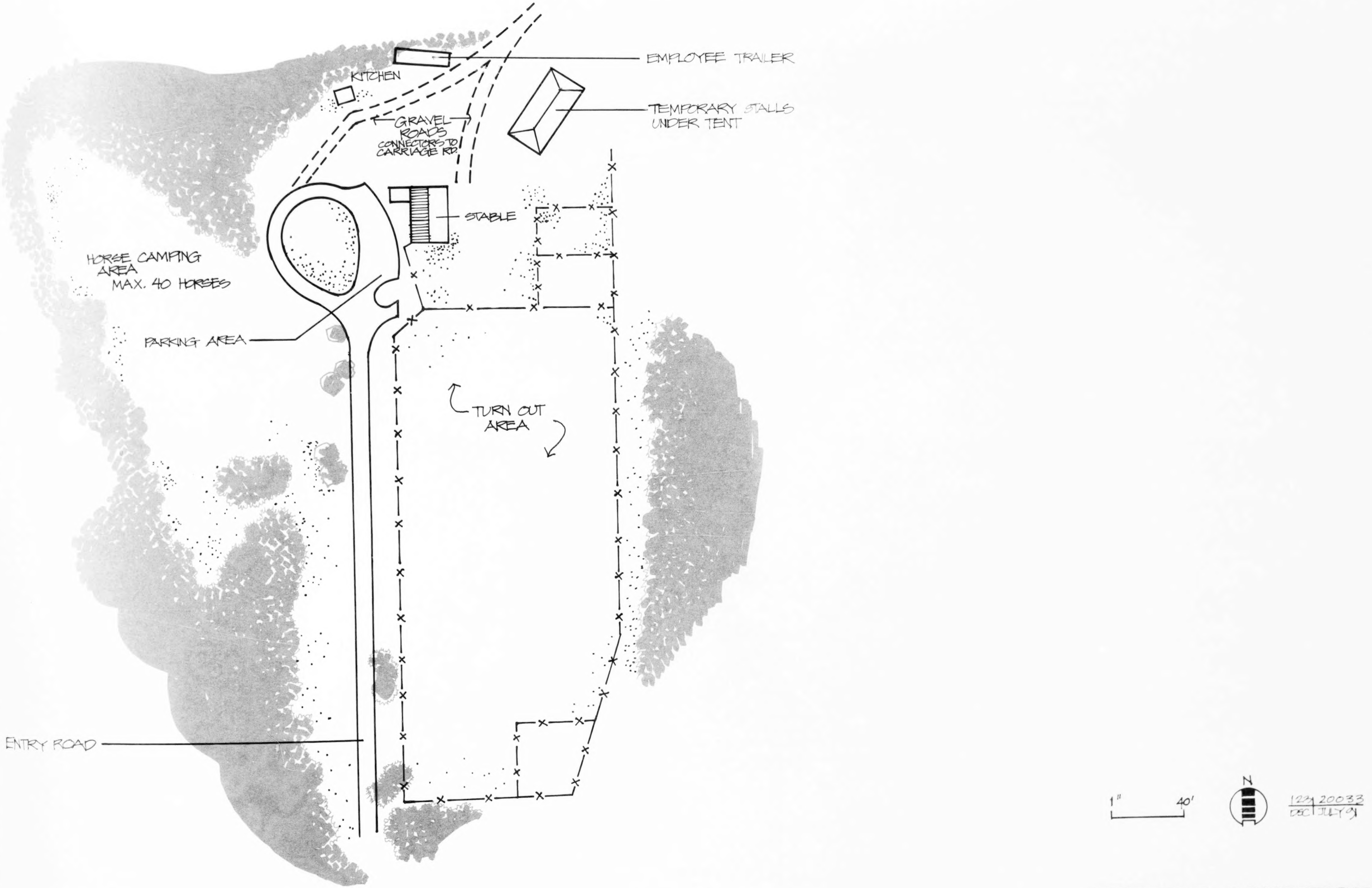

3
3
102
198
102
198
BURNT ISLAND
BAR ISLAND
LONG ISLAND
SHEEP ISLAND
PORCUPINE ISLANDS
BALD ISLAND
Visitor Center
• Expansion
Duck Brook Road
• Bikes only
233
Abbe Museum
• Expansion by 25%
Park Headquarters
• Add shared curatorial storage and rehabilitate maintenance buildings
EAGLE LAKE
Sieur de Monts
Lower Mountain Road
• One way to Paradise Hill Road
• Expand right lane parking
BUBBLE POND
3
Fee Station
Sand Beach
Otter Cliffs Road
Thunder Hole Gift Shop
• Convert to Ocean Drive exhibit and ranger station
102
102
LONG POND
ECHO LAKE
Limit parking
Echo Lake Beach
SOMES SOUND
3
198
JORDAN POND
Jordan Pond House
Wildwood Stables
• Separate horse camping and eliminate horseback riding
SEAL COVE POND
Fire roads
Seal Cove Road
Northeast Harbor
Southwest Harbor
Bear Island
Greening Island
Sutton Island
Islesford Museum
• Add curatorial storage
Little Cranberry Island
Great Cranberry Island
Baker Island
102
102A
Bass Harbor
NEW REST ROOMS *
CARRIAGE ROADS (RESURFACE)
PARK
PARK LOOP ROAD – ONE WAY
PARK LOOP ROAD – TWO WAY
OTHER MAIN ROADS
NOT TO SCALE
N
123 | 20037
DSC | JULY '91


EXISTING
PROPOSED
122'
A
112'
ADMN/MECH/STORAGE
SECTION A-A
85
90
95
100
105
110
115
120
A
A
REMOVE EXISTING BUS DROP-OFF
AUDITORIUM
E
LOBBY
ENTRY
ELEVATOR/STAIRS
UPPER LOBBY
M
W
EXHIBITS
SPECIAL GROUPS
W
M
O
BOOK STORE
SITE/FLOOR PLAN
0'
5
100'
N
123 | 20027A
DSC | JULY 91

MINIMUM ACTION ALTERNATIVE

VISITOR CENTER

ACADIA NATIONAL PARK


EMPLOYEE TRAILER
KITCHEN
GRAVEL ROADS CONNECTORS TO CARRIAGE RD.
TEMPORARY STALLS UNDER TENT
STABLE
HORSE CAMPING AREA MAX. 40 HORSES
PARKING AREA
TURN OUT AREA
ENTRY ROAD
1" 40'
N
123 20033
DSC JULY 91

EXISTING CONDITIONS
WILDWOOD STABLES

ACADIA NATIONAL PARK